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DETROIT

A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

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DOMESTIC TRUCK SALES UP 65% IN FIVE MONTHS

Registrations in May Exceed Year Ago By 62%

NEW YORK, July 18.—Total registrations of motor trucks in the United States in the first five months of this year reached the remarkable figure of 217,823, compared with 131,553 in the corresponding period of last year.

This is a gain of 86,330 in 1929 over 1928, equal to 65 per cent.

Registrations for May, as indicated by complete figures from all states, totaled 52,851, as compared with 32,434 in the corresponding month of 1928. This was a gain of 20,417, equal to 62 per cent., indicating that the rate of increase in May over last year was slightly under that of the four months preceding, which was 66 per cent.

There was, however, a slight recession in truck registrations in May from the level maintained in April, when the total was 56,265, the record figures for this year thus far.

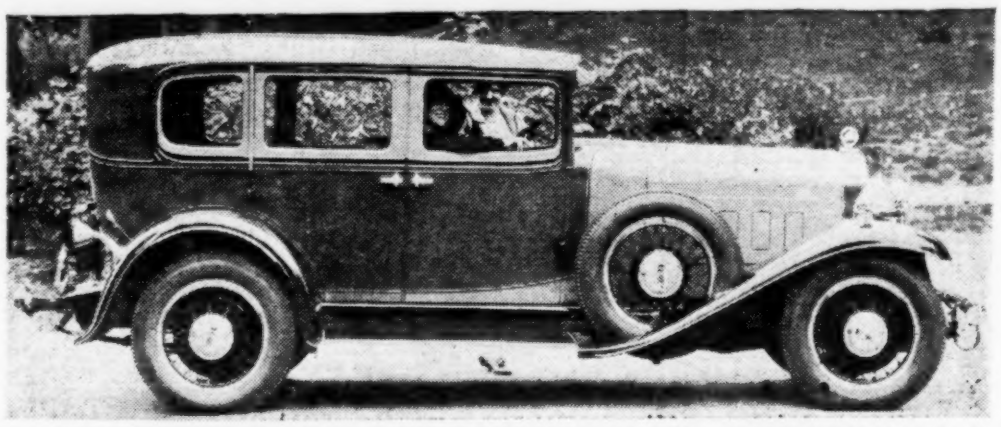
Declines were quite general in May, but it is interesting to note the effect of crop haulage and weather conditions on the truck market. Delaware, which has a heavy demand for early farm products in the neighboring metropolitan sections, showed a gain. Other agricultural states, such as Georgia, Kansas, Maine, Maryland, Minnesota, Missouri and Virginia,

(Continued on Page 4)

BUDD BOOSTS OUTPUT OF AUTOMOBILE DOORS

Philadelphia, July 18.—The Edward G. Budd Manufacturing Company reports a production of 1,233,323 automobile doors for the first six months of 1929. This compares with the production of 1,317,507 doors during the entire year 1928.

Willys-Knight Great Six Sedan



THE FIVE-PASSENGER SEDAN shown above is a striking model in the new Willys-Knight Great Six line announced by the Willys-Overland Company, Toledo. Details of the body design are enhanced by carefully blended colors and the mechanical features are designed for greater speed and comfort, with increased safety.

Cross-Licensing Unity Advocated by Macauley As N.A.C.C. Directors Meet

CLEVELAND, July 18.—Greater co-operation among themselves in the cross-licensing of patents was urged upon directors of the National Automobile Chamber of Commerce at a meeting here today. The directors are here as the guests of Walter C. White, president of the White Company, and are holding their business sessions at the Pepper Pike Club.

Alvan Macauley, president of the Packard Motor Car Company and head of the Chamber, urged this co-operation upon the directors, stating that the next decade will witness a battle for supremacy between the automotive and aeronautical fields. The public, he said, will be the only beneficiary of the increased facilities thus afforded.

Facilitation of production and a steady lowering of operation cost, Macauley said, will place the light sports model airplane in direct competition with the better grade automobile. And, he continued, producers of automobiles, sensing this ultimate demand, are already entering upon a program of production of planes and aeronautical accessories.

"It is a natural trend," Macauley said, "especially regarding the production of engines and parts. We are equipped to handle that type of work and offer the aeronautic industry a foundation which was not afforded us at the outset of our careers. The work of the Packard Motor Car Company, for instance, in developing the Diesel engines for airplanes, is one example."

Taking up the proposed reduction in tariff on motor cars, now under

(Continued on Page 4)

ROAD BUILDERS TO MEET AT CHICAGO

Will Discuss Financing Of Country Roads On Monday

WASHINGTON, July 18.—Use of weight, wheel, ad valorem and oil property taxes for financing county roads will be compared with other sources of income such as gas taxes and highway bonds by the executive committee of the county highway officials' division, American Road Builders' Association, which meets next Monday at Edgewater Beach Hotel, Chicago.

County highway financing is being given much study by the committee this year with a view to development of standard practical methods for the entire country. A questionnaires as to sources of financing brought a variety of answers.

Extension of definite road programs into each of the 3,078 counties of the United States is sought by the county officials' group. It is pointed out that scarcely one-tenth of that number have a real program of either low cost or high type paving.

Officials in attendance at Chicago will be Charles E. Grubb, Newcastle county, Delaware, division president; Otto Hess, Grand Rapids, Mich., who directs the legislative,

(Continued on Page 12)

WILLYS-KNIGHT ADDS GREAT SIX IN 4 BODY TYPES

New Models, Priced at $1,895, Round Out Line

TOLEDO, O., July 18.—The new Willys-Knight Great Six is announced today by the Willys Overland Company. This model, priced $1,895, with the Willys-Knight "70-B" series, completes the Willys-Knight line.

The new model is powered by a Knight sleeve-valve engine with a bore of 3⅜ inches, a stroke of 4¾ inches, with 225 cubic inch piston displacement, developing 81 h. p. at 3,200 r. p. m.

The mechanical features include, besides the sleeve-valve engine, "Finger-Tip Control," one-shot lubrication system, Ross cam and lever type steering gear, manual heat control, automatic radiator shutters, more efficient cooling system, mono-control on windshield, all-internal four-wheel brakes, adjustable front seat and steering post, concealed door handles on roadster model, emergency brake at extreme left of steering column, back-up light, amber-backed double rear vision mirror, new type double drop frame, longer springs and heavy seven-bearing crank shaft. Six wire wheels are standard equipment on all body types of the new line.

Other features include new type,

(Continued on Page 2)

CENTRAL ALLOY STEEL ANNOUNCES PRICE CUT

Massillon, Ohio, July 18.—The The Central Alloy Steel Corporation has announced substantial price reductions on Enduro nirosta steel, covering all forms in which the material is produced. The new metal recently was introduced into this country from Germany under Krupp license. Central Alloy is working toward greatly increased output of stainless steel in response to rapidly growing buying interest in many lines, including the automobile and building industries. The present price reduction is the first step in the company's policy to stimulate consumption by lower quotations as the volume of output expands.

Building in 1929 Half Year Drops 3% From 1928 Period

NEW YORK, July 18.—According to reports made to S. W. Straus & Co. of building plans filed or permits issued in 579 cities in all sections of the country, there was a loss of 29 per cent. from the same month last year and of 3 per cent. for the half year ended June 30.

The decline from May was 16 per cent., and, with the elimination of New York city, 14 per cent. The normal seasonal variation from May to June in the principal cities of the country is 11 per cent. loss and for the urban districts outside of New York approximately 15 per cent.

The volume for the half year just passed was $2,016,948,080, compared with $2,083,537,220 for the corresponding period in 1928. The same 579 cities reported $265,147,516 for June this year and $371,164,175 for June of the preceding year.

In the group of twenty-five cities in which the greatest amount of activity was shown there was a gain for the half year period of 4 per cent., the comparative figures being $1,315,237,985 and $1,263,860,757. In June, however, these important centers reported impressive declines amounting to 39 per cent. It is to be noted that the bulk of this loss came from New York city, where plans filed in June were $37,179,718, compared with $94,672,681 in June last year. San Francisco, Cincinnati, Yonkers, Newark, Oklahoma City and Akron were the only cities in this group which showed signs of increasing building operations on the basis of permits issued last month.

Conditions in the 105 cities of the Pacific Coast states covered in the S. W. Straus & Co. survey compared closely with the situation existing in 1928. There was an increase in these centers for the six months' period of slightly less than 1 per cent. compared with the first half of 1928. Los Angeles reported a substantial gain for the six months' period, but had a small falling off in June. In San Francisco the decline for the six months' period was slight, with a good gain in June. The figures from Long Beach, Cal., showed a large increase for the six months' period and a negligible decline in June. Seattle, the only other Pacific Coast city which found a place in the list of twenty-five cities, reported a decline for the six months' period and for June.

Sterling Truck Sets New Delivery Peak

Milwaukee, Wis., July 18.—The Sterling Motor Truck Company of this city for the fifth consecutive month has broken all records for number of trucks delivered. Although June deliveries in the past have generally shown a decline over the May figures, June this year set a new record both in deliveries and shipments.

In both May and June, the company's shipments ran about 15 per cent. ahead of actual deliveries, thus furnishing a substantial carry-over to the succeeding month. Deliveries in June were 61.6 per cent. greater than in June, 1928.

For the first eight months of the present fiscal year, starting November 1, 1928, Sterling deliveries have been 55.4 per cent. above the corresponding period the year before, and deliveries for the first eight months of this year have been approximately 95 per cent. as large as shipments in the whole of the 1928 fiscal year.

WINTON ENGINE NET PROFIT $384,511 IN SIX MONTHS

New York, July 18.—Net profit of Winton Engine Company for six months ended June 30, 1929, was $384,511 after depreciation, Federal taxes, etc., comparing with $210,189 in first six months of 1928.

G. M. Dealers Sell 194,705 Cars, Trucks During June

DETROIT, July 18.—During the month of June General Motors dealers delivered to consumers 194,705 cars, according to an announcement by Alfred P. Sloan, Jr., president.

This compares with 206,259 for the corresponding month last year. Sales by General Motors manufacturing divisions to dealers amounted to 200,754, or an output of 8,900 cars per day, as compared with 186,160 for the corresponding month last year.

The following tabulation shows monthly sales of General Motors cars by dealers to ultimate consumers and sales by the manufacturing divisions of General Motors to their dealers:—

Dealers Sales to Users

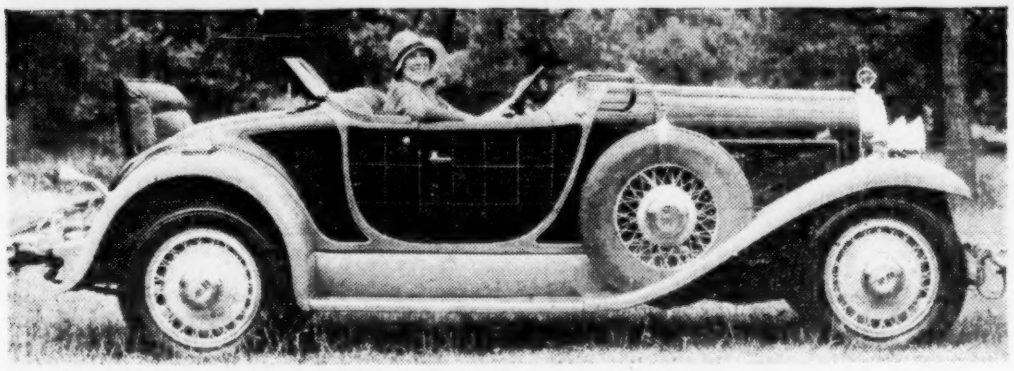
	1929	1928	1927
Jan.	104,488	107,278	81,010
Feb.	138,570	132,029	102,025
March	205,118	183,706	146,275
April	223,303	209,367	180,106
May	214,870	224,094	171,364
June	194,705	206,259	159,701

Divisions Sales to Dealers

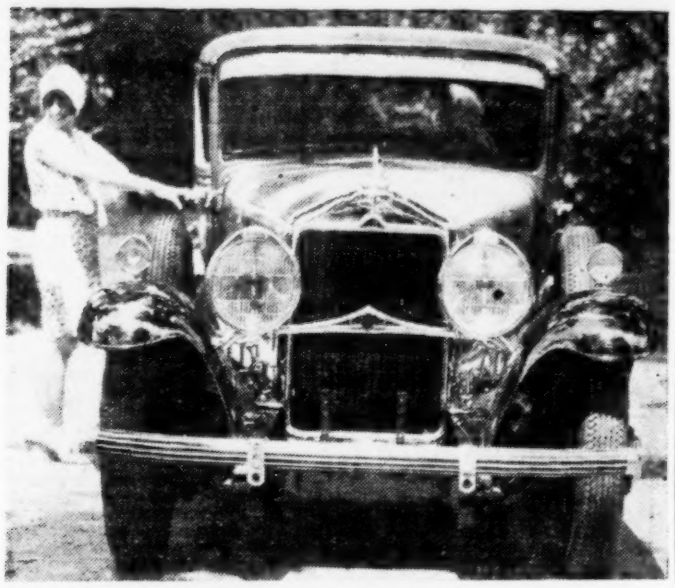
	1929	1928	1927
Jan.	127,580	125,181	99,367
Feb.	175,148	169,232	124,426
March	220,391	197,821	161,910
April	227,718	197,597	169,067
May	220,277	207,325	173,182
June	200,754	186,160	155,525

These figures include passenger cars and trucks sold in the United States, Dominion of Canada and overseas by the Chevrolet, Pontiac, Oldsmobile, Marquette, Oakland, Viking, Buick, La Salle and Cadillac manufacturing divisions of General Motors.

Roadster of the Willys-Knight Great Six Line



NEW STYLE features the lines of the new Willys-Knight Great Six Roadster, announced by the Willys-Overland Company, Toledo. The model is painted in black and spring-time green, with cream striping on the doors, which adds zest to the appearance. Wire wheels and sweeping fenders contribute much to its smartness.



IN-BUILT POWER and speed have been carefully portrayed in the front end design of the new Willys-Knight Great Six. The high, narrow radiator, new hood lines and full crowned fenders of the model shown above speak for themselves.

Willys-Knight Adds Great Six in 4 Bodies

(Continued from Page 1)

three-spoke steering wheel of metal construction, covered with hard rubber shaped for easy steering grip. Trunk rack is standard equipment on all models, while the trunk itself is standard on the five-passenger coupe.

Four models are included in the new line, including a five-passenger sedan, five-passenger coupe, standard coupe and the four-passenger roadster, the latter accommodating two in the front seat and two in the rumble seat.

The Great Six presents a striking difference in appearance from any car built by the company, and incorporates low graceful lines with smart, trim radiator and carefully tailored rear quarters.

A new effect is obtained through the treatment of the molding by means of a sweeping curve the molding on the sides of the car is brought up to the hood at the center of the cowl and then directly forward to a diminishing width at the radiator cap. This innovation permits the effective color treatment employed.

The front view shows the new design of radiator and hood and gives the car every appearance of inbuilt power and speed. This front view picture is completed by the tie-bar between the smartly shaped headlamps with smaller parking lamps mounted on the forward fenders.

Smart wire wheels have large chromium plated hub caps. The radiator lamps and door handles also are finished in chromium plate. Heavier one-piece full crown fenders give a streamline effect rounded out by the smartly mounted spare wire wheels in the forward fender wells.

In the closed models each window is inclosed by a depressed panel. Windows are wide and provide greater visibility. Comfort, luxury and smart appointments characterize the interiors. Seats are upholstered in Bedford cord, with the walls in broadcloth to match. All interior hardware is bronze finish, which blends with the walnut finish of the woodwork.

A modernistic touch is lent to the interiors through the use of corner lamps with amber colored ground glass. The rear window is outlined by one-piece garnish molding. Sedan and the five-passenger coupe are equipped with assist grips.

The instrument panel also shows new treatment, the instruments being set in a bronze oblong decorative setting, with indirect lighting, and are conveniently read either in the day or night.

The roadster, which carries a rumble seat of exceptional roominess and comfort in the rear deck, is done in black and springtime green with smart horizontal and vertical cream striping on the doors. The molding on the sides is carried around the back of the front seat and down the center of the rear deck as a raised panel. In both the front and the rumble seats upholstery is of leather. Interior door handles are of the concealed type, easily reached. The instrument panel has a rich antique silver finish.

The gear shift is smoother and quieter and considerably higher second-gear speed is possible together with a faster pick-up. The timing has been changed and is a factor in producing increased power and higher top speed.

Crankcase legs have been abolished by the use of a spacer between the crankcase and transmission, this being mounted in rubber which softens the minor vibrations. The heavier seven-bearing crankshaft is another important factor that assures a minimum of vibration and results in smooth and quiet operation of the Knight sleeve-valve engine.

The Bijur one-shot lubrication system to the chassis is employed which gives complete and positive lubrication to all important parts. This system is operated by means of a pedal mounted on the toe-board.

Four-wheel brakes are of the full internal expanding type which provides more balance and protection from inclement weather.

Rear axle assemblies use steel parts throughout.

New Chassis Features

The frame is a double-drop type, bottle neck construction. The drop is one and one-half inches, while the difference in width of the frame at the front and rear axle amounts to twenty inches. This unusual type of construction gives the body a highly satisfactory support, while the narrowness at the front permits a thirty-eight degree turning angle without interference when turning to the left.

Shock absorbers on all four wheels and longer springs results in greater riding comfort.

Equalization of cooling for all the cylinders is obtained by means of a new design of the water system. The water now enters the cylinder block from the rear instead of following the former practice of entering the block at the front. Temperature tests have shown this to be the most effective cooling system ever designed for a Willys-Knight sleeve-valve engine.

In long and strenuous tests conducted by the Willys-Overland engineering department in various sections of the country, the new cars showed a speed development of more than seventy-two miles an hour over measured course, timed by stop watches.

Nation-wide distribution of the new models is under way, with car building schedules at all Willys-Overland plants aimed at peak in order to meet the demands of the buying public. Executives of the company state that advance orders indicate that the new Great Six will surpass any previous sales mark ever reached by the company's higher priced line.

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GARDNER TO VOTE ON STOCK INCREASE

Boston, July 18.—Special meeting of stockholders of Gardner Motor Company, Inc., has been called for August 1 to vote on increasing authorized stock to 500,000 $5 par shares, and greatly to widen the purposes and powers of the corporation.

R. E. Gardner, Jr., president, says: "The company has executed two very important contracts, including the one with Sears, Roebuck & Co. of Chicago, to develop a car suitable for sale through their distributing channels."

DETROIT C. D. A. EMPLOYES HOLD ANNUAL FIELD DAY

Detroit, July 18.—A thousand service employees of the Detroit-Chevrolet Dealers' Association, virtually the entire force employed by the twenty-five dealers, participated in their second annual field day at Bob-Lo today. An interesting program of games and entertainment has been planned.

With the exception of the necessary help for emergency jobs, all the Chevrolet service stations in Detroit will be closed for the day.

PREST-O-LITE ADDS TWO NEW ACETYLENE PLANTS

New York July 18.—The Prest-O-Lite Company, Inc., has recently added two new acetylene gas plants located at 540 East 17th St., Wichita, Kan., and at Jones Street and Pennsylvania Railroad, Youngstown, O. These plants will supply local industry with dissolved acetylene for oxy-acetylene welding and cutting.

SPARKS *from* DETROIT

Where Once a Village Stood

* * *

Sunny Summer Sounds

* * *

Ford Buys an Old Mill

Fred Kingsbury—Detroit Editor

THE City of Dearborn, just outside Detroit, is claiming a population of 52,239 in an estimate just made by the Board of Education based on the school census, which shows that 12,438 children of school age reside within the school districts.

It is in Dearborn where Henry Ford has large holdings and where many of his automobile activities are carried on. It also is in this city that Ford's Museum, which is creating so much comment, is located.

Only a few years ago Dearborn was a village and activities within its limits were not heavy. At that time Henry Ford was making automobiles at his huge plant in Highland Park. A little later he moved the major portion of his activities to Dearborn and the River Rouge, with the result that these municipalities began to grow by leaps and bounds.

* * *

John Bonbright, who has charge of publicity and other activities over at the Graham-Paige plant, is not having an enjoyable time this summer, although he manages a smile when his friends call at his office. However, there is little conversation.

It seems the city is building an enormous reservoir across from the plant, where a 135,000 cubic yard excavation is being made and where 1,080,000 feet of piling foundation are being put down. Between the noise from the pile drivers, drills and other activites, to say nothng of dust and dirt, Mr. Bonbright cannot be enjoying hmself thoroughly.

However, he never fails to call attention to the silver lining in this cloud.

"Just think of the beautiful park that will be just across the way in a couple of years," he remarks.

* * *

THE above calls to mind the fact that employees at the Highland Park plant of the Chrysler Motor Company are elated over the fact that paving of streets near the plant has been completed. Employees were handicapped in driving back and forth to the plant over some of the thoroughfares early in the summer.

* * *

One of the oldest mills in Michigan will be added to the Ford Museum of American History. This mill, built in 1810 at Mosherville, twenty-two miles south of Jackson, Mich., is still in good condition, even to the old stones and other pieces of machinery. Mr. Ford decided to move all the mill machinery and the hand-hewn structures to his museum.

This old mill is owned by E. A. Moross, who has always been a great automobile enthusiast. Back in 1902, when Mr. Ford was interested in Barney Oldfield, the former well known automobile racer, Mr. Moross was Oldfield's manager.

* * *

BUS makers probably will converge on Lorain County, Ohio, at the earliest possible moment. It is reported that eleven out of the county's sixty-seven school buses depend on horses for their motive power.

All of the buses carry 3,326 students daily during the school year.

* * *

Walter S. Franklin, just appointed president of the Detroit, Toledo & Ironton Railroad, is well known in Detroit. Recently he has been general superintendent of the Northwestern division of the Pennsylvania Railroad at Chicago. He was formerly general agent in Detroit of the Pennsylvania.

Henry Ford purchased the Detroit, Toledo & Ironton Railroad in 1920 for $5,000,000, and it has been acquired by the Pennsylvania Corporation, an independent corporation owned by its stockholders who are stockholders of the Pennsylvania Railroad Company. The Pennsylvania Corporation was formed a few weeks ago with $87,000,000 in cash on hand.

Wetmore Analyzes Truck Sales in 21 Cities

High Percentage Gain Shown in May and Five Month Period

By JOHN C. WETMORE

LOS ANGELES, July 18.—**That boom conditions are now prevailing in general trade is emphasized by continued heavy gains in the sale of motor trucks. This points not only to growing confidence but also improved finances in the business fraternity at large, in view of the fact that the purchase of added or replacement transport equipment generally awaits an assuredly favorable trade situation.**

Percentage gains over the corresponding periods of 1928 are now far outstripping those credited to automobile merchants, as a comparison of them will show.

A gain in new commercial car registrations in twenty-one cities included in the accompanying table of 61 per cent. in May and 67.4 per cent. in five months is to be compared with increases of new passenger car sales in twenty-six cities of 33.4 and 47.8 per cent., respectively, in these periods.

Exclusive of Ford, the gain of all other motor car makes over 1928 in the twenty-one cities named was 22.5 per cent in May (2,937-2,389) and 16.9 per cent. in five months (11,349-9,701).

Of the thirteen representative makes, whose comparative new commercial car registrations follow eleven showed gains in May and only two fell behind their total for five months.

	May 1929	May 1923	5 Mos. 1929	5 Mos. 1928
1. Ford	2.115	419	7.693	1.338
2. Chevrolet	1,056	928	4.145	3,502
3. Dodge	302	272	1.390	1.673
4. G. M. C.	207	138	732	565
5. International	179	71	507	235
6. Mack	174	217	737	718
7. Reo	137	191	584	762
8. White	118	107	386	419
9. Federal	69	49	228	193
10. Diamond T.	67	35	238	127
11. Autocar	63	49	266	193
12. Fargo	58	0	241	0
13. Studebaker	12	9	46	22

The increase in Ford sales in May was 404.7 per cent. and 473.4 in five months over these periods of 1928. The gain of General Motors (Chevrolet and G. M. C.) was 18.4 per cent. in May (1263-1066) and 19.9 per cent. "to date" (4,8 7-4,067).

The Chrysler Corporation units (Dodge and Fargo) showed a sales increase of 32.7 per cent. in May (360-272), but fell forty-two behind last year 'to date" (1,631-1,673).

Ford sales accounted for 58.1 per cent. of the total in May and 40.4 per cent "to date," as compared with 14.9 per cent. and 12.1 per cent., respectively, for these periods of 1928. Incidentally, Chevrolet's ratio to Ford was 49.9 per cent. in May and 53.7 per cent. for five months.

The May ratio of the G. M. C. pair to the total was 25.0 per cent. in May and 25.6 per cent. "to date," as compared with 37.9 and 36.8 per cent. respectively, for these periods of 1928.

May, 1929, New Commercial Car Registrations in 21 Representative Cities

	May 1929	May 1928	May % gain	5 Mos. 1929	5 Mos. 1928	5 Mos. % gain
1. N. York (Met. Dist.)	2,776	1,727	60.7	9,967	6,702	47.7
2. Detroit	1,452	581	149.9	4,773	2,147	122.3
3. Los Angeles	824	500	60.4	4,303	2,190	96.4
Three Key Cities	5,052	2,808	79.9	19,042	11,039	72.4
4. Philadelphia	638	454	45.2	2,630	1,763	49.1
5. Cleveland	455	303	43.2	1,831	1,091	67.8
6. Boston	408	305	33.7	1,606	945	63.5
7. State Rhode Island	†352	225	56.4	‡	‡	‡
8. St. Louis	316	216	46.2	2,021	1,463	38.1
9. Washington, D. C.	282	150	81.3	893	475	88.0
10. Houston	220	164	34.1	1,110	625	77.6
11. Seattle	195	106	83.9	708	454	55.9
12. San Francisco	178	200	*11.0	922	696	32.5
13. Indianapolis	175	101	73.2	977	482	50.6
14. San Antonio	161	102	57.8	670	411	63.0
15. Portland	147	105	40.0	674	369	82.9
16. Dallas	135	72	87.5	752	387	94.3
17. Denver	127	73	73.9	418	221	89.1
18. Fort Worth	112	68	64.7	534	275	91.3
19. New Orleans	106	81	30.8	642	373	66.7
20. Des Moines	101	82	23.1	411	283	45.2
21. Fargo	44	37	18.9	135	72	87.5
Total	9,104	5,652	61.0	35,976	21,424	67.4

*Loss. †Providence, 271. ‡No Report.

In New Posts

Tacoma, Wash., July 18.—N. F. Rae, who has been engaged in the automobile business here since 1913 both as dealer and sales manager, has been appointed general manager of the Remmert Motor Company, Tacoma Auburn distributor, according to Vito Cuttone, president of the concern.

Seattle, Wash, July 18.—Thomas D. Jennings, traffic manager for Washington Motor Coach System, has resigned to accept a similar position with the Union Pacific Stages. His headquarters will be in Portland, Ore. B. T. Peyton, general manager of the Union Pacific Stages, has just made the news public.

Seattle, Wash., July 18.—Martin Shields has been appointed service and parts superintendent for S. L. Savidge, Inc., Hupmobile distributors here.

Seattle, Wash., July 8.—Howard R. Phelps has been appointed retail sales manager of the Bowyer Motor Company, Marmon Roosevelt distributor here. Phelps was formerly a partner in the motor car dealership of Phelps & Ryan, Inc.

Union City, N. J., July 18.—Hall-Auf de Heid, Inc., Lincoln distributor for Hudson county, has appointed G. H. Blanchard as service manager. Blanchard has been employed by the Lincoln Motor Company division of the Ford Motor Company in charge of Lincoln service for the Eastern district for seven years.

Hartford, Conn., July 18.—Joseph M. Brancherry, vice-president and general manager of the Williams Oldsmobile Company, distributor of the Oldsmobile and Viking in Hartford county, has been elected president to succeed F. W. Williams, resigned. Williams, former president and founder of the company, resigned to become executive vice-president of the Underwriters Finance Company of Hartford of which he has been a director since its organization in 1921. A. C. Hine, president of the A. C. Hine Company, state distributor of the Oakland and Pontiac, has been elected a director of the Underwriters Finance Company.

NEW STEWART TRUCK DISTRIBUTOR NAMED

Cambridge, Mass., July 18.—A. W. Cox & Co., Inc., 15 Hayward St., has been appointed distributor for the Stewart Motor Truck Corporation products in this city and vicinity. Mr. Cox operated the first motor truck which arrived in Boston for commercial use.

He began in the automobile business by way of the Knox factory, and helped Harry Knox build his first car. He went to Springfield with Mr. Knox when the latter started the Atlas truck factory there and helped to build the first heavy duty truck, which had two cylinders on the rear axle and no cab, with the radiator on a sub-frame beneath the body. He has served as dealer for Mais and Morgan trucks.

BUS LINE AUTHORIZED

Richmond, Va., July 18 (U. T. P. S.).—The McConnell-Elliott Bus Line has been authorized by the State Corporation Commission on the ground of public convenience to operate motor passenger service between Gate City and Bristol.

In New Quarters

Superior Wis., July 18.—Russell S. Sherman, Inc., Dodge Brothers automobile dealers in Superior, formerly located at 1106 Ogden Ave., have moved into new and larger quarters at 1711 14th St., in a new building which was recently completed.

Improvements

Detroit, July 18.—The Miller-Judd Company, distributor of Nash motor cars, announces the construction of a new sales and service building at Cass and Ferry Avenues, that will offer Nash owners every service convenience available to motorists.

Designed to feature a modernistic style, the structure will also evidence influences of the Gothic motif that will produce an architectural effect that does justice to its designer, Albert Kahn, Detroit architect. When completed it will represent an investment of half a million dollars.

It will be of two-story construction and will be of reinforced concrete. The roof will be utilized for brake testing and parking purposes, as well as for a complete Duco painting and upholstering department. A series of ramps will lead to these departments. A salesroom will occupy a space of 5,000 square feet and will face on Cass Avenue. The service department will be reached through a wing and will be equipped to fit the needs of every Nash owner.

Joplin, Mo., July 18.—Expanding used car business and need of space for more adequate servicing have forced the Joplin Supply Company, local Ford dealer, to buy two lots on Wall Street, between 3d and 4th Streets, and to erect a used car pavilion there. The old space formerly occupied by the used car department is now devoted to servicing exclusively.

Los Angeles, July 18.—Construction of a one-story building at 1330 South Figueroa St., will start soon for J. W. Leavitt & Co., Willys-Overland distributors. The structure will cost $40,000. It will be engineered with a trussless roof and will have an eighty-foot open front without posts to give a clear vision of the display room.

Los Angeles, July 18.—Work has started on the erection of an automobile salesroom at 1221 South Figueroa St. for the Smith-Stanton Corporation, Hudson Essex dealers.

Buffalo, July 18.—The Riverside-Dodge Company has awarded a contract for construction of its new building, to be erected in Tonawanda Street, near Ontario Street, to William H. Patterson of 259 Ontario St., Buffalo. The new company, which enters the automotive field for the first time, has decided to add a complete accessory department to its business.

Monrovia, Cal., July 18.—Work has started on a new $20,000 building to house the Ford dealership of Harry Nelson at 127 East Lemon St. The structure will be 75 by 183 feet with two large stockrooms on the first floor and the mezanine will be in the rear of the show room. Employees rest room, public rest rooms, private office and general office are called for in the plans.

Williamstown, Ky., July 18.—The Williams Motor Car Company of this city formally opened its new garage which will house Chrysler and Plymouth cars and the products of those factories. The garage has a capacity of 100 cars and is of fire proof construction. J. M. Williams, proprietor, will handle accessory tires and tubes.

NEW BUS AND MOTOR FREIGHT LINE FORMED

Duluth, Minn., July 18.—A new motor transportation company has been formed in Duluth and is known as the Sellwood-Johnson Transportation Company. The company will engage in the motor transportation business of passenger, baggage, mail, express and freight by trucks, buses and other vehicles with the place of transacting the business as Duluth.

Officers of the new company are: J. G. Sellwood of Duluth, president and treasurer; J. M. Johnson of Duluth, vice-president, and Perry R. Moore of Minneapolis, secretary.

Atlanta, Ga., July 18 (U. T. P. S.).—Remodelling work will start soon on the building occupied by the Ernest G. Beaudry Automobile Company at 169-173 Marietta St. Proposed improvements and changes will make this one of the finest automobile houses in the city, it has been announced.

Moreland Truck Has Record June Sales In Seattle Section

Seattle, Wash., July 18.—June was the greatest month ever enjoyed in the Seattle territory by Moreland Motor Truck Company, according to Claude Botsford, general plant superintendent, who was here this week, winding up his visits to Moreland plants.

Mr. Botsford said that the new six-wheel truck law enacted in Washington is recognition of that improved type of truck operation, and has stimulated business greatly.

The Moreland factory branch in Seattle is rapidly nearing completion. It is being erected at Seattle Boulevard and Norman Street. Jack Lane is local branch manager.

TO HANDLE TRACTORS

Memphis, Tenn., July 18.—The Banker Road Machinery Company, 257-259 Butler Ave., has taken over the dealership for Cleveland tractors in this territory.

Dealers *delighted*

WITH
STUDEBAKER'S
NEW

DICTATOR EIGHT

at $1185 *at the factory*

"This new low priced Dictator Eight has opened up a new market for Studebaker. Our sales will increase fifty per cent."

C. S. REEDER,
Knoxville, Tenn.

"New Dictator Eight offers amazing performance and value at its low price. Our sales will increase 25 per cent.—perhaps 40 per cent."

GREGG MOTOR COMPANY,
Tulsa, Okla.

"Sold three new Dictator Eights before announcement—salesmen so enthusiastic over first sample we ordered two extra carloads."

MOSEHART *and* KELLER AUTO CO.
Houston, Texas.

"New Dictator Eight looks like another winner. We will increase our business at least 35 per cent. with new Studebaker eights and sixes."

GLENN E. THOMAS,
Long Beach, California.

"The new Dictator, with its size, appearance and straight eight motor will surely dominate the field of $1000-$1500 cars. Please make every effort to increase our allotment."

MANKIN-FERRIS CO.,
Akron, Ohio.

IN addition to growing profits from eight-cylinder sales, Studebaker dealers can profit from three great sixes—priced $860 to $1525. Get the facts on this most valuable franchise from *America's friendliest factory*. Address Department 88, The Studebaker Corporation of America, South Bend, Indiana.

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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EDITORIAL DEPARTMENT

350 Hudson St., New York, N. Y. Telephone CANal 1000
Alexander Johnston, Editor. L. E. Levick, News Editor.
Detroit Bureau—Fred Kingsbury, Editor, 427-8 Fisher Building, Detroit, Mich., phone Empire 3500. Contributing Editor, John C. Wetmore.

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Promoting Self-Confidence

IN his recent book, "Men and Machines," Stuart Chase has some extremely interesting suggestions regarding the effect of machines on human character. From our own point of view, the most significant statement in the book is this: "Certain machines, particularly the automobile, have tended to expand the ego, promote self-confidence and a sense of power in persons and classes who otherwise might go timidly to their graves. This virtue has its drawbacks, but on the whole, biologically and racially, it seems to register a gain."

In considering the obvious financial contributions of the motor vehicle to our national life, we tend to overlook the even more important psychological effect of the automotive vehicle on human character. The command which ownership of a car gives the individual over time and space inevitably changes his attitude toward life.

If we were to take a ditch digger, used to scratching painfully in the surface of the earth for nine hours a day, lifting shovel after shovel of dirt with profuse perspiration, and were to place him on the driving seat of a ditch digging machine that under his hand tore a gash in the ground in a few minutes that would have taken the man a day to do, that ditch digger's attitude toward life never would be the same again. He would have gained the feeling of mastery over nature and over the job that he once did in the sweat of his brow and by the ache of his muscles. This may be an exaggerated simile, but it is essentially true.

At the present time there are about 25,000,000 people driving motor vehicles in these United States. Most of these are heads of families, with the cares and responsibilities of such a position heavy upon them. It is no uncommon thing for a man so situated to develop an inferiority complex; to let his responsibilities swamp his initiative and force him to "go timidly to his grave."

No man can say accurately exactly how far the stimulus of handling a motor vehicle of his own has contributed to better the psychological condition of the 25,000,000 individuals who make up our automotive population. No one can say how far this bolder state of mind has contributed to the tremendous economic development of America during the past ten years. The cumulative effect on all those who have driven cars and are today driving them must have been enormous, and the ultimate effect on the economic development of the country is beyond calculation.

Otto von Bismarck, who certainly never could have been classed as a sentimentalist, used to say that in international politics it was what he called "the imponderables" that were ultimately the deciding factors. By imponderables he meant patriotism, love of home, fear of losing it, fear of alien domination, as opposed to the practical means of waging war, armies, armament and what not.

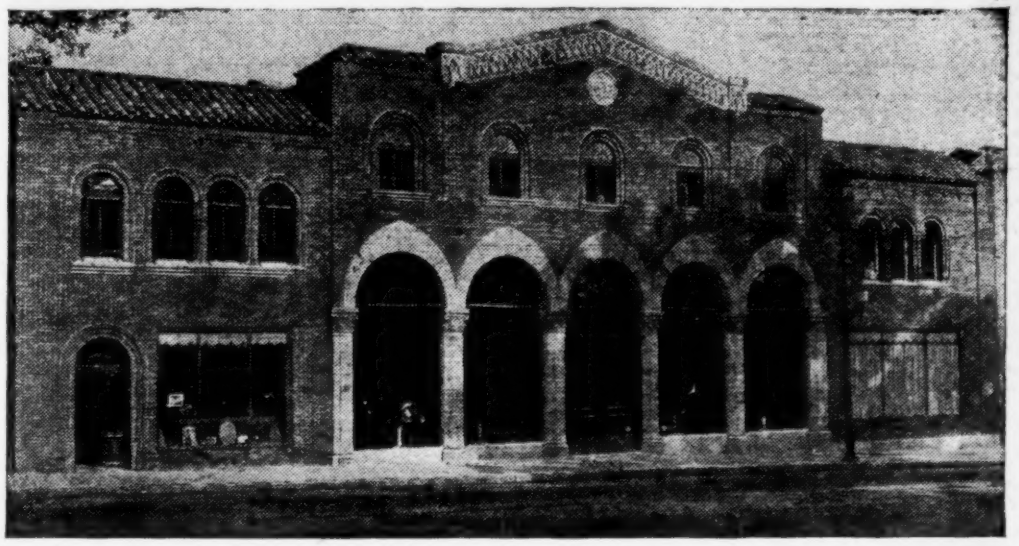
Surely we are justified in believing that the "imponderables," the self-confidence, the egotism, if you will, that come with a mastery over time and space, are in the final analysis the greatest contribution to human progress that the motor vehicle has made. Without some factor of tremendous force, no nation could have established the record of economic progress that has been registered in this country since the World War ended. We are justified in believing that the increased use of motor vehicles has supplied a considerable part of this progress-forcing factor.

Never a Decrease

DURING the sessions of state Legislatures just finished, nine bodies increased the gasoline taxes of their respective communities. Several others held increases in abeyance or voted to submit the question to a vote of the people.

Some day a state Legislature is going to decrease its gasoline tax, and when it does the dome of the capitol will blow off in surprise.

New Home of Greensboro Buick



The new home of the Greensboro Motor Car Company, Buick, Marquette and G. M. C. truck dealers, at Greensboro, N. C., has been formally opened to the public and, outside of the Buick factory branch building in Charlotte, it is the largest automobile sales and service building in North Carolina. The building represents an investment of $100,000 exclusive of the real estate. It contains 39,000 feet of floor space, is of Italian architecture, and is of two-stories brick and steel construction. Frank C. Boyles is president of the firm, which opened in 1907. H. M. Chamblee is treasurer and general manager, F. C. Correll is secretary and assistant manager, Pierce Rucker is vice-president, and Harry Clendenin is vice-president in charge of sales.

Cross-Licensing Unity Urged at N.A.C.C. Meeting

(Continued from Page 1)

consideration by a sub-committee of the Senate Finance Committee, Macauley confidently predicted that the rate eventually would be lowered from 25 to 10 per cent. He believes the prevailing rate on trucks will remain unchanged.

"The import of automobiles to this country," he stated, "is almost nothing compared with our exports. About 20 per cent. of our total production, or 1,000,000 cars, will be exported this year, as compared with approximately 700 cars which will be brought into this country. I do not believe that the proposed reduction of tariff here will precipitate a similiar move by foreign countries."

A report of the tariff hearing before the House and Senate committees in which Macauley outlined the desires of the industry is part of the program of the meeting.

Discussion also centered about the proposed nation-wide advertising campaign for used cars and further co-operation with the Society of Automotive Engineers and the Petroleum Institute regarding fuel research. The directors also considered plans for co-operation with city planning foundations with regard to safety measures and the beautifying of public highways. The N. A. C. C. program also includes a number of road improvements.

Alfred Reeves, general manager of the organization, announced that indications to date point to a huge increase in production of motor cars in this country, due mainly to the increasing demand abroad. Production, Reeves stated, will be 5,200,000 cars, breaking all previous records. During the first six months, he said, there were turned out 3,422,750 cars. Reeves reiterated his plea for immediate steps toward uniform traffic regulations as a measure against accidents and asked that a limit be placed on gasoline taxes.

Progress in economical production has made possible 735 different models, it was reported at the meeting today. One manufacturer, it was said, is offering fifty-four types at present.

The group took breakfast at the Union Club and then proceeded to the Pepper Pike Country Club for a business meeting and golf.

Among the directors present were William E. Metzger, president, and M. L. Pulcher, vice-president of the Federal Truck Company; H. H. Rice and Alfred H. Swayne, General Motors Corporation; C. W. Nash, president of the Nash Motor Car Company; Robert C. Graham, president of the Graham-Paige Motor Car Company; Charles O. Haetings, chairman of Hupmobile Motor Car Corporation; J. S. Marvin, assistant general manager of N. A. C. C., and R. E. Fulton and E. C. Fink, vice-presidents of the Mack Truck Company.

Buffalo, N. Y., July 18.—Plans have been filed with the city building commission by the Trico Products Company, manufacturer of automatic wind shield wipers, for an addition to its plant at 817 Washington St., to cost $50,000 with machinery and equipment.

Truck Sales Jump 65% In First Five Months

(Continued from Page 1)

also purchased more trucks in May than in April, as did the fruit and lumber states of Washington and Oregon. Oil activities in New Mexico boosted sales there, and Michigan and Wisconsin made substantial gains.

Among the trucks to show substantial gains in the five months' period over last year were Ford, Chevrolet, Diamond T, Brockway-Indiana, International, Sterling, Stewart and Studebaker.

A comparative list of registrations for May and April, 1929, by states follows.—

	May, 1929	April, 1929
Alabama	527	798
Arizona	345	267
Arkansas	612	737
California	2,835	3,039
Connecticut	875	1,039
Colorado	558	339
Delaware	180	176
Florida	552	394
Georgia	747	692
Idaho	136	153
Illinois	2,602	2,720
Indiana	1,232	1,470
Iowa	1,256	1,406
Kansas	1,103	1,033
Louisiana	548	549
Maine	806	665
Maryland	810	762
Massachusetts	1,961	2,273
Michigan	3,099	2,922
Minnesota	1,459	1,113
Mississippi	550	539
Missouri	1,347	2,042
Montana	391	625
Nebraska	695	815
New Hampshire	375	372
New Jersey	1,488	2,020
New Mexico	132	160
New York	5,653	5,618
North Carolina	981	699
North Dakota	470	648
Oklahoma	1,131	1,239
Oregon	577	476
Pennsylvania	3,585	3,861
Rhode Island	339	313
South Carolina	507	491
South Dakota	412	254
Tennessee	550	684
Texas	2,649	3,685
Utah	168	204
Vermont	389	291
Virginia	1,021	848
Washington	777	771
West Virginia	589	618
Wisconsin	2,216	2,056
Wyoming	132	141
District of Columbia	282	196

Following are registrations of the leading makes of trucks for the first five months of 1929, compared with the first five months of last year:—

	1929	1928
Autocar	1,182	881
Brockway-Indiana	2,190	1,423
Chevrolet	66,732	52,733
Diamond T	1,647	801
Dodge	12,959	*15,640
Fargo	1,094	....
Federal	1,266	1,262
Ford	89,655	12,661
G. M. C.	6,574	6,537
International	13,305	8,637
Mack	3,008	3,021
Pierce-Arrow	319	†
Relay	276	264
Republic	166	363
Reo	6,069	6,806
Rugby	464	†
Sterling	622	421
Stewart	904	769
Studebaker	699	135
Whippet	1,668	†
White	1,935	2,748
Willys-Knight	247	....
Yellow	....	116
Miscellaneous	4,627	5,985

*Then Graham Bros. †Carried under miscellaneous.

CALENDAR OF COMING EVENTS

JULY

16-27—**London, England.** Olympia International Aircraft Show.
17-19—**Minnesota.** Motor Trade Association meeting at Breezy Point Lodge.
22-23—**Cincinnati, O.** National Team & Motor Truck Owners' Association annual convention.
25-26—**Chicago, Ill.** National Association of Show Managers' meeting.

AUGUST

24-Sept. 2—**Cleveland, O.** National Air Races and Show.
26-28—**Cleveland, O.** Society of Automotive Engineers aeronautic meeting.

SEPTEMBER

7-15—**Chicago, Ill.** International Aircraft Exhibition.
9-13—**Cleveland, O.** American Society for Steel Treating. Eleventh Annual Convention.
9-12—**Cleveland, O.** American Welding Society. National Fall Meeting.
9-12—**Cleveland, O.** Institute of Metals Division, American Institute of Mining and Metallurgical Engineers. National fall meeting.
9-12—**Cleveland, O.** Iron and Steel Division, American Institute of Mining and Metallurgical Engineers. National fall meeting.
9-13—**Cleveland, O.** National Metal Exposition at Public Auditorium.
9-13—**Cleveland, O.** First Annual Metal Congress.
11-13—**Cleveland, O.** Iron and Steel Division, American Society of Mechanical Engineers. National fall meeting.
15-21—**Springfield, Mass.** Eastern States Exposition.
28-Oct. 4—**Atlantic City, N. J.** American Electric Railway Association Convention.
30-Oct. 4—**Cleveland, O.** National Machine Tool Builders' Association Convention.

OCTOBER

2- 4—**Cleveland, O.** Society of Automotive Engineers' Production meeting.
3-13—**Paris, France.** Automobile show.
7- 8—**Erie, Pa.** Pennsylvania Automobile Association ninth annual convention.
12—**Tulsa, Okla.** Oklahoma Tire Dealers' Association meeting.
16-18—**Detroit, Mich.** Society of Industrial Engineers Convention.
17-26—**London, Eng.** Automobile show.
23-30—**Prague, Czecho-Slovakia.** Automoneering Congress.
29-Nov. 22—**Tokio, Japan.** World Engineering Congress.
—**Sioux City, Ia.** Automobile Merchants' Association Convention.

NOVEMBER

4-9—**Chicago.** Motor & Equipment Association Annual Business Exhibit.
7-16—**London, Eng.** Truck show.
11-14—**Chicago, Ill.** National Tire Dealers Association Convention and Trade Exhibition at Sherman Hotel.
11-16—**Detroit, Mich.** National Standard Parts Association Show and Convention.
14-24—**Paris, France.** Truck show.

DECEMBER

1- 7—**New York.** Automobile Salon at Hotel Commodore.

Latest Engineering News of the Industry

Beckmann Analyses Aluminum Progress

Cincinnati, July 18.—M. A. Beckmann, chief engineer of Aluminum Industries, Inc., of this city, recently addressed a meeting of engineers at the plant. Speaking of recent aluminum developments, he said:

"Two defnite developments with regard to uses of aluminum since the war have been notable. Aluminum castings are finding their way into all sorts of byways of industry, each having its own peculiar problems to be solved by metallurgists. Automobile, as well as aircraft designers are leaning continually toward higher performance for given weight, bringing more severe stress and temperature conditions than formerly.

"Increasing industrial demand for alloys has resulted in a great array of specifications and at least fifteen different alloys of zinc, copper, nickel, tin, manganese, magnesium, silicon, et cetera are in current use. While the physical properties obtainable by alloying aluminum with other metals appears to have a well-defined range, the opinion among engineers is universal that the existence of a majority of these alloys is unjustified by any peculiar value. Definite progress in the last ten years is said to lie not so much in the discovery of new alloys as in the methods of dealing with them after they are alloyed.

"The question of purification is one of the real problems with which the metallurgist has to deal. The speckled metal or pinholed appearance that shows upon a machine surface, spoiling an otherwise good casting, is the nemesis of the aluminum founder. The growing necessity in the aircraft industry for solid and sound castings has made this trouble assume a much greater significance.

"Metallurgists are convinced this difficulty is due not so much to dirt or dross as to dissolved gases, mainly hydrogen. This growing knowledge of the effect of gases is bringing them to a point where they will not be so anxious to rid metals of gases as to concentrate on the introduction of some peculiar gas which will endow the material with valuable physical properties.

"Heat treatment of aluminum-alloy castings necessarily is bound up intimately with the question of initial soundness, and research and development in this connection have brought aluminum foundries to the point where the blemished casting is most unusual. In construction of railway and tramway rolling stock aluminum also is taking a front rank. Doors of aluminum alloy, which lends itself to successful casting in thin sections, permit of special shaping to the contour of the car and afford a degree of rigidity and constancy in dimension lacking in other metals. Aluminum-alloy castings also are used widely in electrical equipment.

"Critics of American motor cars hold to the theory that manufacturers in this country have devoted more time to the problem of mass production than to improvement of individual design and that the cars, as a result, lack that diversity noted in European makes. It is admitted, however, that American manufacturers rapidly are adopting new ideas to improve their products along definite lines. Weight reduction is becoming more necessary daily. If a 4,000-pound car can be speeded up to twenty-five miles an hour in fifteen seconds it follows that a 2,000-pound car will reach that speed in one-half the time. Conversely, if the heavy car can be stopped in 100 feet, the light-weight machine can be brought to rest in one-half the distance.

"The key to light weight necessarily is the use of light alloys of aluminum. While the construction of housings constitutes an appreciable fraction of car weight, pistons, pins, cylinders, carburetors, axles, wheels and frame and body work comprise the main element. In the manufacture of these component parts automobile engineers and designers rapidly are turning to aluminum alloys just as airplane designers, whose every effort is being devoted to the matter of weight reduction, are concentrating on that metal."

W. F. Martin Adds Top Cylinder Oiler

W. F. MARTIN, INC., Chicago, Ill., manufacturers of Roman bumpers and Roman dust cloths, announce the addition to their line of two models of top cylinder lubricators.

The Roman top cylinder oiler is built with a diaphragm which seals the vacuum changer, regulating the adjustment of a needle valve which allows the flow of oil to increase with the increased speed of the motor.

It is a known fact that as motor speeds or loads are increased that the vacuum decreases in direct proportion and all lubricators of the so-called vacuum type allows the flow of oil to drop at the time that the most oil is needed. Its performance is similar to the vacuum windshield wiper on a car.

The Roman top cylinder oiler is built to correct the difficulties experienced with vacuum and it operates with a diaphragm that has a set screw to regulate the travel area of the diaphragm to compensate for the difference in the vacuum of a new car and a car that has been driven for several thousand miles.

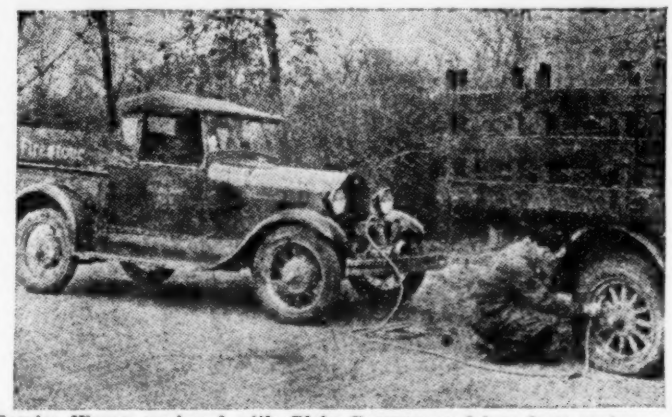
It is built with a check valve in the fitting that attaches to the manifold and thus prevents the backfire of a motor going through the tube and into the oil receptacle.

All Roman top cylinder oilers are packed in display packages containing all necessary fittings, tubing, etc., and one pint of Roman lubricant.

Roman lubricant is a special compounded mineral oil as free from carbon as consistent with good lubrication and contains no gum or resin such as found in vegetable oils or does it contain any acids such as are in cheap grades of lubricating oils.

NEW CAR LAUNDRY

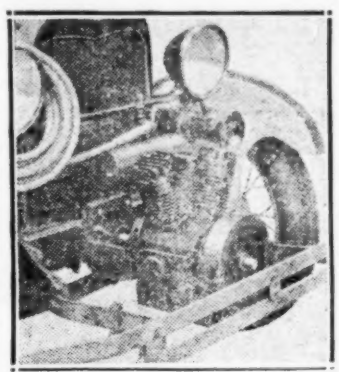
Dubuque, Iowa, July 18.—The Stumm Auto Laundry has been opened at the corner of 7th and Iowa Streets, with Ed Stumm proprietor. The firm offers twenty-four hour service and uses the Weaverized system. Other services are offered including battery and tire.



Service Wagon equipped with Globe Compressor driven from engine.

Globe Compressor Is Mounted on Car

AN ENTIRELY new development in air compressors is the Globe outfit which mounts on the front of the car. It is driven directly from the motor crankshaft by means of a patented power take-off. Any make of car, truck or tractor can be utilized. It is made by the



New Globe Compressor on front of car.

Globe Manufacturing Company, Battle Creek, Mich.

For the service station that offers emergency road service the equipment eliminates the need for carrying a pressure tank and of filling this tank on every call. On a road job when air is required for tire inflation, or for any other purpose, this new outfit will furnish an ample supply. It is only necessary to throw in the clutch, start the service car or truck motor, and the compressor is immediately in operation. When air is no longer required, merely throw out clutch and compressor stops. The compressor need only be in operation while air is required, not while driving the car to the job or back to the station.

This new Globe compressor is also designed for paint spraying on all classes of outside work; also for operating pneumatic tools such as drills, chisels, etc. Industrial plants, painting contractors, out-door advertising companies, municipal departments and public utilities, as well as service stations, will find this equipment a very profitable investment. It cuts out entirely the high cost of hand work and the time loss of transporting heavy apparatus. With this new Globe unit, it is claimed, factories, barns, fences, signs, water plugs, fire alarm boxes, etc., can be painted in a fraction of the ordinary time required. Holes can be drilled or chipped more easily and more quickly, also, it is said.

The compressor is light in weight and takes but a small part of the power developed by any automobile motor. It will not strain the car or overload or overheat the engine. Timken bearings, lubricated by means of positive oil rings are standard equipment.

The original installation of the power take-off can be made without tearing down the motor. After the power take-off has been installed, the compressor can be removed or replaced in a few minutes. The outfit is offered in one standard size. This size is of sufficient capacity for all tire inflation work, and will operate one paint spray gun at low motor speed, or two guns at higher speed. Globe also makes a special water-cooled compressor of this type for unusually heavy-duty work.

NEW DUNLOP WAREHOUSE

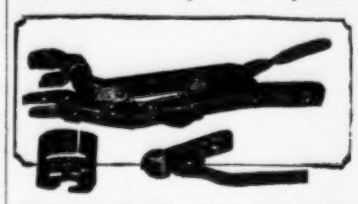
Duluth, Minn., July 18.—Announcement has been made of the appointment of Wahl's Every Service Garage at 120 2d Ave., West as retailer and operator of the Duluth warehouse for Dunlop tires and inner tubes in the Duluth trading territory.

NEW VALVE LIFTER OUT BY SUNNEN CO.

THE Sunnen Products Company of St. Louis, announces a new Continental valve lifter set, claimed to make it easy to lift a valve on the new type motor where the valve assembly is almost hidden.

The lifter is adapted to such cars as the Dodge six, Durant, Graham-Paige, Studebaker, Jordan, Peerless and all Continental and Lycoming motors.

The Sunnen Continental lifter set consists of a valve lifter, split lock catcher and split lock replacer.



NEW SUNNEN valve lifter for close work.

CHEMICAL PACK FOR HEAT-TREATING STEEL

CHICAGO July 18. — A new process of heat-treating steel by a chemical pack method known as the Edstrom system and which, it is claimed, will increase the life of steel parts in use from 10 to more than 100 per cent., is announced as ready for leasing to producers by O. E. Edstrom, 3407 Ogden Ave., the inventor.

The process, according to Mr. Edstrom, increases the toughness and density of the metal without increasing its hardness and brittleness. It can be applied to carbon or to tool steel of any grade. The chief advantage claimed is that it reduces chipping to a minimum. The cost is said to be comparable to present heat treating costs.

Tests both in the laboratories and in actual use on the job have tended to substantiate these claims. No commercial use has yet been made of the process except that the treatment has been applied to finished cams, chisels, ball bearings, knives and other tools in service in manufacturing plants in a number of different industries for the purpose of demonstrating the practicability and value of the method.

NASHVILLE, TENN., BANS SUNDAY GASOLINE SALES

Nashville, Tenn., July 18.—Sunday gasoline and oil will be placed under a closer ban than formerly, according to Chief of Police J. L. Foster, in warning filling station operators here against selling except in emergency cases.

TODAY'S NEW CAR REGISTRATION REPORT FOR JUNE, 1929

These returns are carried in Automotive Daily News from day to day, as received up to hour of publication. Recapitulation of these daily reports is published every Saturday

States	Auburn	Black Hawk	Buick	Cadillac	Chevrolet	Chrysler	DeSoto	Dodge	Durant	Elcar	Erskine	Essex	Ford	Franklin	Gardner	Graham-Paige	Hudson	Hupmobile	Jordan	LaSalle	Lincoln
Rh. Island	32	1	122	14	524	89	101	86	26		1	162	629	17	3	69	41	28	4	24	3

States	Locomobile	Marmon	Marquette	Nash	Oakland	Oldsmobile	Packard	Peerless	Pierce-Arrow	Plymouth	Pontiac	Reo	Roosevelt	Stearns-Knight	Studebaker	Stutz	Viking	Whippet	Willys-Knight	Windsor	Miscellaneous	Totals
Rh. Island		9	15	75	14	51	26	17	11	80	144	36	12	2	51		6	94	42		7	2663

THIS TABLE, BROUGHT UP TO DATE, RUNS EVERY FRIDAY IN THE AUTOMOTIVE DAILY NEWS

First Revision, June, 1929, New Commercial Car Registrations

Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Readers desiring county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies.

Commercial Car Registrations do not include buses.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Fargo	Federal	Ford	G. M. C.	International	Mack	Pierce-Arrow	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Miscellaneous	Totals	States
Illinois	5	10	445	66	92	11	3	783	32	115	36	1	1	34			4	1		18	17		65	1739	Ill.
N. Dakota			101	3	8	1		117	12	68			1	4		1				2		1	1	320	N. D.
S. Carolina			173		13	3	4	171	6	11	8			2						2	1		3	397	S. C.
Totals	5	10	719	69	113	15	7	1071	50	194	44	1	2	40		1	4	1		22	18	1	69	2456	Total

Plant Extensions

Newark, N. J., July 18.—The Western Electric Company has leased for a long term of years the Newark property 132-152 Tichenor St., and 52-54 Hermon St., fronting 210 feet on Tichenor Street and 175 feet on Hermon Street. There is a three-story reinforced concrete industrial structure as well as a one-story building on the lot. The Western Electric is installing machinery and will use the premises for its tool-making department. The larger building was erected by Pell & Sons, last manufacturers, who several years ago sold their interests to the United Last Company of Boston, a subsidiary of the United States Machinery Company. The structure underwent considerable improvement.

Montreal, July 18.—Permit has been obtained by the Canada Cement Building for the construction of a four-story public garage on Bleury Street, to cost $250,000.

Chattanooga, Tenn., July 18.—The Brown Tire Company has enlarged its building to take care of a fast-growing patronage, according to T. F. Brown, president.

Hartford, Conn., July 18.—The Scientific Brake Service Company is doubling the size of its plant at 351 Ann St. The business of the concern has been growing and for some time past the quarters have been cramped.

Joplin, Mo., July 18.—Quarters of the Mohawk Tire Service Company, 301 Main St., are being remodeled at a cost of $8,000.

Joplin, Mo., July 18.—Ideally located for tourist trade on United States Highway No. 66 at Broadway and Virginia Avenues, Fred Carmody's filling station business will be expanded to include a $20,000, two-story modern tourist hotel and supply store, with private garage space for each guest's automobile.

Decatur, Ill., July 18.—The Biflex Products Company, which is concentrating its bumper manufacture at its plant on West Garfield Street in this city, has let contracts for construction of a $50,000 forge department building, north of its present main building, which will be 150x160 feet, to be finished by mid-September. The Biflex factory will then cover a tract of 150x750 feet with 114,000 square feet floor space here. A. J. Grmm. vice-president, announced that $100,000 worth of new equipment will be installed in the new plant and R. F. Peterson, plant manager at Waukegan, is moving here this week to take charge of the unit.

WISCONSIN AXLES

Truck salesmen have no difficulty selling when their product is Wisconsin equipped. Buyers, today, recognize the investment value of these axles. Engineers include them in specifications to make selling easier.

WISCONSIN AXLE CO. Oshkosh, Wis.

WATCHING OIL DEALERS IN CONNECTICUT CITIES

Hartford, Conn., July 18.—Now that there is an oil law in Connecticut distributors of the better brands are keeping close watch on the filling stations. One flagrant case that came to the attention of a distributor was the putting of an inferior oil in the distributor's barrel and selling it direct from this container as the genuine article.

SHELL BUYS STATIONS OWNED BY BURGESS

Utica, N. Y., July 18.—The Shell Eastern Petroleum Products, Inc., has acquired the local filling stations and warehouse distributing equipment of Frank Burgess. The properties acquired include a large terminal plant on Railroad Street, with barge canal facilities, fifteen delivery trucks and numerous retail filling stations throughout Greater Utica and Oneida county.

MEXICAN PETROLEUM BUYS FIVE CONNECTICUT STATIONS

Hartford, Conn., July 18.—The Mexican Petroleum Company of New York has purchased five stations operated by Harry Leavitt of this city for a price reported to be $150,000. Leavitt will continue to conduct the stations for the present. Previously the petroleum company had purchased six other stations of Leavitt and engaged him to manage them.

Memphis, Tenn., July 18.—The Arthur Doyle Company, local Ford dealership, has announced the appointment of John A. Stephenson as manager of the used car department.

Personnel Notes

Los Angeles, July 18.—T. G. Graham, first vice-president of the B. F. Goodrich Company of Akron, is visiting in this city for the first time. His headquarters are at the local Goodrich factory. He traveled via Transcontinental Air Transport.

Boston, Mass., July 18.—W. N. Jacobus, now in charge of Firestone service in this city, is the first man now at a Firestone branch to reach twenty years' service with the company. He joined the organization in June, 1909, as a clerk in the original New York branch. For a time he supervised the New York warehouse, and was transferred to Boston five years ago.

Maryville, Tenn., July 18.—G. R. Swany, plant superintendent of the Aluminum Company of America, accompanied by Mrs. Swany, has left for Morehead City, N. C., to spend his vacation on the coast.

GARAGE CHANGES HANDS

Rochester, N. Y., July 18.—Edward A. McArdle has purchased the Kellogg Garage at 17-21 State St., this city, from the Kellogg estate and plans to continue its operation. The property is one of the oldest garages and service stations in Monroe county.

PICKWICK BUYS ALBATROSS

Joplin, Mo., July 18.—Pickwick Stages System, Inc., has purchased the Albatross coach line, operating between Joplin and Springfield.

Final Revision, Complete May, 1929, New Commercial Car Registrations

Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Readers desiring county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies.

Commercial Car Registrations do not include buses.

States	Autocar	Brockway Indiana	Chevrolet	Diamond-T	Dodge	Fargo	Federal	Ford	G. M. C.	International	Mack	Pierce-Arrow	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Miscellaneous	Totals	States
Alabama		1	224		20	1	3	240	7	20	2			3					1	2		1	2	527	Ala.
Arizona			93		28	1		173	8	19	1			8		2			5	2	3		2	345	Ariz.
Arkansas		4	193	1	22	1	2	317	5	46				12					2	1	4	1	1	612	Ark.
California	16		517	4	207	8	29	1447	85	69	42			121	4	26	23	8	19	5	40	1	164	2835	Calif.
Colorado		1	197		38	2	1	251	19	27	3			4	1	1			1	1	7	1	3	558	Colo.
Conn.	10	15	222	4	86	5	6	265	34	41	39	1	2	71		4	2	23	8	6	7	3	21	875	Conn.
Delaware	2		48		12			80	12	14		1		7	1						2		1	180	Del.
Florida		4	148		13	1		357	2	14	1			6						3	3			552	Fla.
Georgia	4	6	292		32	1	1	347	4	30	7	1		8					1	2	8	1	2	747	Ga.
Idaho			62		10			33	5	10	2			6		3			1		2		2	136	Idaho
Illinois	6	13	784	88	121	6	15	1077	52	200	32	3		49	1		5	2		13	19		116	2602	Ill.
Indiana	4	16	392	5	86	1	5	517	44	68	3		12	32				10	7	14	10	1	5	1232	Ind.
Iowa		7	557	1	44	8	3	372	23	157	3		1	51	2	4			3	7	3		10	1256	Iowa.
Kansas		4	408	1	60	5		462	19	98				20	2	1			1	6	5	1	10	1103	Kan.
Kentucky	1	1	210	5	31	4	1	198	28	44	6		2	25					3	6	4	1	15	585	Ky.
Louisiana		2	160		14	1		283	16	56	2		1	3						6	3	1		548	La.
Maine	1	1	313	3	47	5		356	15	15	3			36		2	1		1	5	1		1	806	Me.
Maryland	19	7	233	16	49	2	8	295	34	52	24	2		21	1	1	11	5	2	3	18	1	6	810	Md.
Mass'setts	41	15	428	17	165	24	19	758	81	109	68	3	2	103		2	27	10	3	13	28	4	41	1961	Mass.
Michigan	10	1	910	5	129	31	26	1494	124	152	23		1	110		1			5	21	10	3	43	3099	Mich.
Minnesota			508	3	53	2	8	689	24	108	2		1	37		1			2	10	6	3	2	1459	Minn.
Mississippi		2	198		11	2		285	4	44				4										550	Miss.
Missouri	4	22	426	19	72	8	12	586	36	69	17	5		29		4	3	1	4	14	8	3	5	1347	Mo.
Montana			99		18	1	1	196	12	34	3		2	10		2				6	4	1	2	391	Mont.
Nebraska		2	277	2	20			284	30	55	3			10					2	6	4			695	Neb.
Nevada			15		16	2		36	4	1				2					1		1		4	82	Nev.
N. Hamp.		10	136	1	24	3		152	12	14	5			10		1		3	2	1	1			375	N. H.
New Jersey	25	17	440	5	79	9	14	565	48	46	46	1	3	56	2	5	10	7	12	9	25	6	58	1488	N. J.
N. Mexico		1	58		6			45	6	10						1				1	4			132	N. M.
New York	84	208	1332	76	351	54	42	1998	170	305	200	32	12	192	2	8	16	98	16	44	127	12	274	5653	N. Y.
N. Carolina		2	306		40	2	3	285	16	16	4			7		3		2	2		7		4	699	N. C.
N. Dakota			155	1	20			156	13	101		1	1	9		4				5		2	2	470	N. D.
Ohio	29	31	744	15	145	18	24	1183	76	202	44	7	4	73	7	4	4	6	3	40	69	18	71	2817	Ohio
Oklahoma	3	2	409		38	4	7	505	19	102	1			14	1				2	6	8	3	7	1131	Okla.
Oregon			146		28	2	7	256	28	30	13			26		3	1		1		14		22	577	Ore.
Penn'vania	58	35	866	24	255	24	16	1481	112	158	95	5	11	145	4	11	38	31	10	40	83	4	79	3585	Penn.
Rh. Island	6	2	94		30	8	15	96	26	7	11	1		23			6	3	2	2	3		4	339	R. I.
S. Carolina			203		18	2	9	253	3	11	1			2	1						3		1	507	S. C.
S. Dakota			131	1	18	4		137	10	84				18		3			2	1		1	2	412	S. D.
Tennessee		1	267	6	21		10	194	8	24	6			6		1			1		3		2	550	Tenn.
Texas	4	2	1066		84	1	6	1173	46	182	1		2	34		3		2	5	9	16		13	2649	Texas
Utah			52		8	1		86	1	5	1			6		4					2		2	168	Utah
Vermont		10	87		38	5	5	141	8	56	3	1		16				6			3	4	6	389	Vt.
Virginia	6	7	427	1	42	1	7	399	20	64	3		3	12	4	3		5	4	6	6		1	1021	Va.
Wash'gton			195		44	2	2	370	37	37	3			19	2	6			2	5	21		32	777	Wash.
W. Virginia	1	5	208	4	42		2	226	11	50			4	21	1	1		2	2		6	3		589	W. Va.
Wisconsin		1	627	36	84	8	15	1047	48	161	8	1	3	58	1	7	16	8	8	29	14	4	32	2216	Wis.
Wyoming			37		9	2		68		9	1			2					3				1	132	Wyo.
Dist. of Col.	1	5	61	6	15		2	138	9	4	11	1	3	6			2	10		2	6			282	D. C.
1929 Totals	335	463	15961	350	2843	272	326	22352	1454	3230	743	66	70	1543	37	122	165	242	149	352	621	84	1071	52851	1929
1928 Totals	265	373	13865	195	*2741		372	4679	1866	2439	912		77	1888	81		123	220	135		634		1569	32434	1928
1927 Totals	211	313	8884	167	*3898		322	13544	511	1561	718		†73	727	114		52	151			767		1984	33997	1927
1926 Totals	309	239	4691	167	*4900		540	19089	276	1335	1054		†85	1496	85		68	129			951		1754	37168	1926

Foot Note: Acme, Ruggles and Yellow are included in the Miscellaneous Column. *Graham at that time. †Garford at that time.

Financial News of the Automotive Industry

RANGE OF AUTOMOTIVE STOCKS

WEDNESDAY, JULY 17, 1929

NEW YORK STOCK MARKET

Previous 1929 High	Previous 1929 Low	Div.		Sales	High	Low	Close	Net Change
104⅞	27	....	Advance Rumely ...	600	40	38	38	+ ½
119	40⅛	....	do pf	100	55	55	55	....
179	95⅛	3	Air Reduction	3,500	179	170	179	+ 9
11¼	4½	....	Ajax Rubber	1,800	5¼	5	5⅛	....
284	166	7	Allis Chalmers	1,300	284	280	281½	....
....	....	....	do pf	No sales today				
73¼	40½	....	Am. Bosch Magneto.	900	56⅛	55¼	55¼	— ¾
85½	70¼	7	Am. Chain pf.....	200	83½	83	83½	+ 1
8⅞	4½	....	Am.-La France	200	4⅞	4⅞	4⅞	+ ⅛
405	221	4	Auburn	1,100	394¾	389	389	— 2
136¾	110¼	3	Bohn Aluminum	1,100	130	129	129½	....
63⅛	30¼	....	Briggs Mfg. Co.....	4,500	35½	34¼	35⅛	+ ⅜
73⅞	42½	3	Brockway Motor	500	48	46⅞	47	+ ⅛
39¾	28¼	....	Chicago Pneu. Tool.	1,100	38	37	38	+ 1
....	....	....	Chicago Yellow Cab.	No sales today				
135	66	3	Chrysler Corp.	35,200	72½	70⅛	71⅝	+ 1⅛
....	....	....	do pf	No sales today				
62⅝	43	2	Commercial Credit...	8,100	49½	48	48⅞	+ ⅝
....	....	....	do pf	No sales today				
195	131½	4	Com. Invest. Trust...	15,100	174	165	172	+ 2¼
....	....	....	do pf	No sales today				
28⅜	14⅛	.80	Continental Motors..	4,100	14⅜	14½	14½	— ⅛
99⅜	58⅛	3.50	Cutler-Hammer	5,500	99⅜	97	99	+ 2½
202	155¾	4	Du Pont	8,900	194½	187½	191	+ 3
76¾	56	3	Eaton Axle & Spring	1,000	63⅜	62	62	— 1
174	126¾	6	Electric Auto-Lite ..	7,500	167	164¼	164½	— 2¾
92⅞	77	5	Elec. Stor Battery...	2,500	87¼	86⅛	86⅛	— ⅞
73¾	55	2.50	Evans Auto Load....	1,800	57	52⅞	52⅞	— 5
22½	5	....	Emerson Brant A....	200	8⅞	8¼	8⅜	+ ⅜
....	....	....	do pf	No sales today				
22⅜	13¾	.80	Federal Motors	400	15½	15⅜	15½	....
20⅛	7⅝	....	Fisk Rubber	900	8⅞	8½	8⅝	+ ⅛
....	....	....	do 1st pf.....	No sales today				
33⅞	20	....	Gabriel Snubber	500	23¼	23	23¼	+ ⅛
360	290	4	General Electric	15,900	352⅜	345½	345½	— 3½
25	10½	....	Gardner Motor	5,600	15⅜	13⅞	14¾	+ 1¼
91¾	68⅜	3	General Motors	67,500	71¾	70½	71½	+ ¾
....	....	....	do pf	No sales today				
126½	122½	7	do 7s pf.....	100	123	123	123	....
....	....	....	do deb	No sales today				
63⅜	36⅞	1.25	Glidden Co.	2,000	58¼	57⅜	57⅞	+ ⅝
....	....	....	do pf	No sales today				
105¾	73	4	Goodrich	6,200	80½	78⅜	79¼	+ ⅛
115⅛	111	7	do pf	100	111½	111½	111½	....
154½	112	5	Goodyear T. & R....	7,300	123⅜	120⅜	121⅛	— ⅝
104⅞	101	7	do pf	100	101⅛	101⅛	101⅛	+ ⅛
54	25	....	Graham-Paige Motor	11,200	29¾	27¾	29⅜	+ ⅝
68⅜	32⅛	8	Hayes Body	5,500	35⅛	33½	33⅝	+ ⅛
93½	75⅛	5	Hudson Motor Car...	6,200	88	86⅜	87⅜	+ 1½
82	39½	2	Hupp Motor Car.....	3,600	42½	41½	42½	+ ¾
32½	17¾	....	Indian Motocycle ...	400	19½	19¼	19¼	— ¼
14¼	8¼	....	Intercon. Rubber	800	9⅜	9¼	9¼	— ¼
119¾	92	2.50	Internat. Harvester..	46,600	125¼	119½	124	+ 6¼
145	139	7	do pf	500	139	139	139	— ¼
242¾	152½	3	Johns-Manville	26,500	195¾	189½	191¾	+ 1¾
16½	6	....	Jordan Motor Car...	600	7⅞	7⅞	7⅞	....
24	11	....	Kelly-Springfield ...	1,700	14⅜	14	14¼	— ¼
....	....	....	do 6s pf.....	No sales today				
....	....	....	do 8s pf.....	No sales today				
59¾	40¼	2	Kelsey-Hayes Wheel.	2,100	46⅜	45	45⅞	+ ⅞
....	....	....	do pf	No sales today				
25	10	....	Lee Rubber & Tire..	100	14	14	14	....
61	49⅞	2.60	Link Belt	100	52¼	52¼	52¼	— ⅝
114¾	91	6	Mack Trucks	1,500	97¾	97	97¾	+ ¾
104	66¾	4	Marmon	700	79½	77⅝	79½	+ 1½
89⅞	69⅛	2	Marlin Rockwell.....	200	76	76	76	....
....	....	....	Martin Parry	No sales today				
34⅞	20	....	Mengel	3,300	29	28⅛	28⅞	+ ⅜
28⅞	17½	....	Miller Rubber	100	17¾	17¾	17¾	+ ¼
8	4	....	Moon Motors	1,400	4	4	4	....
....	....	....	Moto Meter A.....	No sales today				
206	96½	2	Motor Products	700	130	129	130	+ ¾
48⅜	39	2	Motor Wheel Corp...	1,800	44⅞	41⅛	44½	....
....	....	....	Mullins Mfg. Co.....	No sales today				
100⅞	62	3	Murray Corp.	5,700	91¾	90	91⅝	+ ½
118⅞	81⅛	7	Nash Motors	1,200	88	86⅛	87½	+ 1⅛
....	....	....	do pf	No sales today				
6¼	2½	....	Norwalk T. & R.....	100	2⅝	2⅝	2⅝	....
....	....	....	do pf	No sales today				
10⅞	7½	....	Omnibus Corp.	6,000	9⅜	8⅛	8⅞	+ ¾
51¼	37	....	Otis Steel	24,600	51¼	48⅜	50½	+ 1⅞
153¾	116½	3	Packard Motor Car..	8,800	133⅞	130½	131¾	+ ¾
22½	11⅛	....	Peerless Motor Car..	200	12⅞	12⅞	12⅞	+ ¾
37⅞	27½	....	Pierce-Arrow	700	34	33½	34	— 1
....	....	....	do pf	No sales today				
31⅞	21¼	.80	Reo Motors	1,900	21½	21¼	21½	+ ¼
12¼	6	....	Reynolds Spring	800	7⅛	7⅛	7⅛	....
66¾	45	....	Spicer Mfg. Co.....	400	53	53	53	— ⅞
....	....	....	do pf	No sales today				
77	65	3.50	Stewart-Warner Spd	2,600	72	71½	71¾	....
....	....	....	Stromberg Carbur....	No sales today				
98	73⅛	5	Studebaker Co.	4,400	78⅜	75⅛	76¾	+ ⅞
....	....	....	do pf	No sales today				
31	22⅝	.60	Timken Det. Axle...	2,200	23¾	22¾	23	— ½
110¾	73½	3	Timken Roller Bear.	2,600	106	104⅝	104⅝	— 1⅛
63	38¾	2.50	Trico	1,000	59⅞	58¼	59½	+ 1
65	42	....	U. S. Rubber	3,600	52½	50¼	51½	+ 1⅛
92½	73	....	do 1st pf	200	77	76½	76½	— ½
42⅞	28½	2	Warner Quinlan	500	32½	32	32	— ½
54½	43¼	2	Westinghouse A. B..	3,800	50⅞	50⅛	50¾	— ⅛
53½	38	1	White Motors	800	43	42½	42½	— 1
35	20	1.20	Willys-Overland	17,100	25⅝	24¼	25	+ ¼
103	92	7	do pf	500	97⅛	95½	96	+ 1
82	61¾	4	Yale & Towne.....	400	82½	82	82	....
51¼	34¾	....	Yellow Tr. & Coach.	4,500	39⅜	38	38⅞	+ ⅜
....	....	....	do pf	No sales today				

NEW YORK CURB EXCHANGE

Sales		High	Low	Close	Net Chge
	Bendix Avia...	No sales today			
	Borg Warner...	No sales today			
	Briggs & Strat	No sales today			
300	Budd Ed	20	19	20	— ⅜
	Bullard Co.....	No sales today			
600	Caterpillar T..	84¾	83⅞	84¾	— ¾
500	Checker Cab...	73½	72¼	73⅜	+ 1⅛
103000	Cities Serv....	45⅛	43	45⅛	+ 2¼
100	do pf	94	93½	94	+ ⅜
600	Con Di Fibre..	41	39	40⅛	— ⅜
500	Doehler D C...	31½	31	31½	+ ½
500	Durant Motor..	11¼	11	11	— ¼
	Fageol Motor..	No sales today			
800	Fedders	31	30⅞	31	....
	Federal Mogul.	No sales today			
500	Fiat	27½	27⅜	27½	+ ⅛
100	Firestone	260½	258	260¼	+ 1¼
	do pf	No sales today			
1500	Ford Canada..	51⅛	48⅛	50¼	— ⅜
4100	Ford Ltd	17⅞	17	17½	— ⅜
200	Franklin Mfg..	42	41	42	+ 2
	Gen T & Rub.	No sales today			
	Gr'n'd T & D.	No sales today			
500	Hall Lamp	24⅜	23½	24⅜	+ ⅜
	Henney	No sales today			
	Hood Rubber..	No sales today			
	India Tire	No sales today			
	Isotta Fras	No sales today			
	Jaeger	No sales today			
1500	Lakey	22½	22	22	— ⅛
	Marvel Carb...	No sales today			
	McQuay Norris	No sales today			
1300	Nat Rub Mach.	32¼	31⅜	31⅝	— ¾
200	Paramount Cab	18⅜	18½	18⅜	— 1⅛
200	Perfect Circle..	60⅛	60	60	— ⅛
	Pines Winter..	No sales today			
200	Pitts Pl Glass..	71	70¾	71	+ 1
1700	Raybestos	110	105	110	+ 6
	Rep M T ctfs..	No sales today			
	Rolls Royce Am	No sales today			
	Ross Gear	No sales today			
	Safe T Stat....	No sales today			
	Seiberling	No sales today			
13500	Serv-el Inc	19⅛	18⅞	19½	+ ½
	Sparks With...	No sales today			
100	Stutz Motor...	14½	14½	14½	— ⅛
2600	Thermoid Co..	31½	29⅛	29¾	— 1¾
600	Thompson Prod.	54½	52	54½	+ 4⅜
200	Triplex	18	18	18	— ⅛
	U S Asbestos..	No sales today			
200	Watson, J W..	4	4	4	....
	Wayne Pump..	No sales today			
200	West Auto	72½	72⅛	72⅛	....
	Wire Wheel....	No sales today			
	Yel Taxi N Y..	No sales today			

NEW YORK OVER THE COUNTER

Div.		Bid	Asked
6	Am Hard Rubber.....	80	84
10	Dixon (J) Crucible.....	166	171
3.50	Doehler D C.....	40	45
7	do pf	100	106
....	Eisemann Magneto	31	35
7	do pf	95	100
3.50	Manhattan Rubber	50	..
....	Rolls Royce Am.....	18	22
....	do pf	49	54
1.20	Smith (A O).....	215	225
....	Splitdorf Beth E.....	7½	8½
2	Ward La Fr Tr Co A....	33	35

CHICAGO STOCK EXCHANGE

Sales		High	Low	Last
50	Acme Steel	124½	124½	124½
150	Ainsworth	52	50	52
3100	Allied Motors	44	42	43⅞
650	do pf	51	48⅞	51
600	Allied Products	72¾	71	72
650	Auburn Auto	392	385	390
3400	Borg Warner	119½	118	118¾
50	do 7s pf.....	102¾	102¾	102¾
150	Chain Belt	51⅞	50½	50½
300	Chicago Yellow Cab	29½	29½	29½
200	Houdaille Hersh A..	45¾	44¾	44¾
250	do B	45	44½	44⅞
50	McCord R A.....	39¼	39¼	39¼
400	Modine	69½	69	69½
850	Muncie Gear A.....	22¾	20½	20⅝
300	do B	10	9¼	10
200	Nachmans	60	59	60
300	National Battery pf	44	43⅛	44
4350	Noblit Sparks	54	52½	53½
100	Perfect Circle	60	60	60
950	Pines W F.....	71½	70½	71
50	Ross Gear	49	49	49
3900	Warchel	29½	28¼	29
800	do pf	32	31¼	32
10	Waukesha Motor ...	175	175	175
50	Wayne Pump	19	19	19

CLEVELAND STOCK EXCHANGE

Sales		High	Low	Last
100	Central Alloy	47½	47½	47½
5	Falls Rubber	5	5	5
190	Faultless Rubber ..	30	30	30
40	Firestone 7s pf....	108⅜	108½	108½
55	General Tire pf....	95	95	95
20	Glidden pr pf.....	105	105	105
100	Jaeger Machine	33	33	33
16	Miller Rubber pf...	58½	58½	58½
20	Mohawk Rubber....	49	49	49
30	Packard Electric....	34	34	34
340	Seiberling Rubber...	33	30⅛	30⅛
100	Stearns Motor	2⅞	2⅞	2⅞

DETROIT STOCK EXCHANGE

Sales		High	Low	Last
500	Brown Mfg Co.....	58	58	58
150	Detroit Motor Bus..	7	7	7
200	Frost Gear	21½	21½	21½
525	G R Metalcraft....	13⅛	13	13⅛
2163	Hall Lamp	24½	22⅜	24⅛
490	Jackson M S.....	21⅛	21	21
593	Packard n.....	27¼	26⅞	27⅛
3320	Universal Products.	42½	41½	42
200	Wilcox-Richards B.	45¼	45	45¼

OUTSIDE CLOSING PRICES
(Per pound, delivered New York)

	Bid	Asked
Plantation—		
Ribbed smoked sheets, spot....	20¾	21⅛
July	20¾	21⅛
July-September	20⅞	21¼
October-December	21¾	22
January-March	22⅜	22⅝
Spot—		
First latex crepe.....	22¼	22½
Thin pale latex.....	22⅝	22⅞
Clean thin brown crepe.....	18⅜	18⅝
†Specky crepe	18	18¼
Rolled brown crepe.....	13⅜	13¾
No. 2 amber.....	18¼	18½
No. 3 amber.....	18½	18¾
No. 4 amber.....	18¾	19
*Paras—		
Up-river, fine, spot.....	22¼	22½
do coarse	11½	12
Accra, fine, spot.....	22¾	23
Caucho, ball—Upper	12	..
Centrals—		
*Esmeraldas	11½	12
*Central scrap	11½	12
Guayule, washed, dried.....	..	19
†Balata—		
*Block Ciudad	54	..
*Surinam sheet	56	..
*Manaos block	55	..
Peruvian block	25	26

SCRAP RUBBER
(Dealers' buying prices, f. o. b., New York)
Boots and shoes, black, ton....$18.00a20.00

Rubber Prices

New York, July 18.—Rubber futures fluctuated sluggishly in a thin, dull market yesterday without getting much of anywhere in the end. At the close prices ranged from 10 points higher to 10 points lower than at Tuesday's close. Early in the day buying interest proved strong enough to carry prices upward 20 or 30 points, but trade died away to the vanishing point after the advance and did not revive until late in the day when offers were again reduced. The last few sales took place at levels about 10 points above the day's lows.

RUBBER EXCHANGE OF NEW YORK

	High	Low	Close	Prev. close
July	20.90	20.60	†20.70	20.70
August	....	....	*21.00	21.10
September....	21.50	21.30	21.20a21.30	21.30
October	21.70	21.60	*21.60	21.50
November	....	....	*21.80	21.80
December	22.30	22.00	†22.00a22.10	22.10
January	22.40	22.10	†22.10a22.20	22.20
February	....	....	*22.40	22.50
March	23.00	22.70	†22.70	22.70
April	....	....	*22.90	22.90
May	23.40	23.20	23.00a23.10	23.00
Sales			367	687

Tone barely steady.

*Nominal. †Trading.

The A. D. N. Analyst Looks Them Over

DAYTON RUBBER MANUFACTURING COMPANY

THE new tire merchandising plan of the Dayton Rubber Manufacturing Company is proving very successful, and up to the middle of this year orders were received calling for annual shipments of tires in excess of more than $8,000,000, according to a recent statement of John A. MacMillan, president.

This company was one of the few rubber manufacturers to make a fair showing in operations last year, in which the collapse in the crude rubber market caused huge inventory losses in the tire industry. Its profit in 1928 amounted to $634,427, as compared with $1,065,507 in the preceding year, this loss not having been considered great in view of the circumstances under which the company worked.

While all details of the new tire merchandising plan of the company have not been made public, Mr. MacMillan says the principle underlying the plan has to do with the elimination of unnecessary waste in distribution and enables delivery of tires to dealers at lower prices.

In addition to a large tire business, the Dayton company has developed a successful fan belt and industrial cog belt business. More than 85 per cent. of the automobile manufacturers in this country have models equipped with the Dayton V-type belts, and the Dayton cog belt drive is meeting with considerable success.

The Dayton company also manufactures belts for refrigerators, washing machines and various kinds of pumps. The tires are sold under the trade names, Dayton Thorobred Cords and Dayton Stabilized Balloons. The company's plant is located at Dayton, O., and has a capacity of about 3,000 tires, 2,500 tubes and 25,000 belts per day. It was recently announced by the company that it would build at once a $140,000 addition to its plant in order to increase capacity.

The company was incorporated in 1905 under the laws of Ohio. Its capital stock consists of the following:—

$7,500,000 in 7 per cent. preferred cumulative $100 par stock authorized, of which $1,593,400 is outstanding.

25,000 shares of priority no par common stock, of which 21,245 shares are outstanding.

50,00 chares of class A no par common, of which 49,889 shares are outstanding.

50,000 shares of class B no par common, of which 50,000 shares are outstanding.

The preferred stock has preference as to dividends and assets and is callable at 110. The priority common has second preference as to assets and 7 per cent. non-cumulative dividends. It is entitled to $100 on liquidation. The class A common has third preference as to assets up to $75 a share, after which class B is entitled to $75 a share, after which class A and B share alike. Class A and B stocks have equal voting power.

Regular 7 per cent. dividents are being paid on the preferred and priority common stock and 3½ per cent. on the class A. All stock except class B is listed on the Chicago Stock Exchange.

The earnings of the Dayton Rubber Manufacturing Company in the past three years have been irregular, in common with the rest of the industry. In 1926 there was a deficit of $809,168 and in the following year the net income was slightly more than $1,000,000 and in 1928, $634,427.

The balance sheet of th company as of December 31, 1928, showed total current assets of $2,924,198, as compared with total current liabilities of $1,136,819, leaving an indicated net working capital of $1,787,370. This compared with a net working capital of $1,979,414 at the close of 1927.

The officers of the company are: J. A. MacMillan, president and general manager; C. E. Hooven, vice-president and secretary; A. L. Freelander, vice-president; D. W. Warden, vice-president and assistant treasurer; A. E. Baker, treasurer; H. T. Bucharo, assistant treasurer; E. F. Rigg, assistant secretary. Directors are Mr. MacMillan, W. G. Pickrel, A. L. Freelander, C. E. Hooven and E. A. Baker. The fiscal year conforms to the calendar and the annual meeting is held on the second Tuesday in February.

Following is a comparative balance sheet for December 31, 1928 and December 31, 1927:—

Assets	1928	1927
Land, buildings, equipment, etc. (less deprec.)	$1,435,460	$1,380,99
Patents and good will	252,876	252,30
Investments	5,090	4,31
Other assets	10,524	20,37
Deferred charges	53,614	42,6
Current assets		
Cash	206,150	224,28
Government securities	10,000	....
Accounts and notes receivable	1,232,589	1,627,18
Inventories	1,475,450	1,557,75
Total current assets	$2,924,189	$3,409,23
Total assets	$4,681,753	$5,109,75
Liabilities		
Preferred stock	$1,593,350	$1,593,40
Common stock and surplus	1,628,968	1,575,25
Funded debt	300,000	450,00
Reserve for contingencies, adv., etc.	22,616	61,29
Current Liabilities		
Notes payable	660,000	1,050,00
Accounts payable	89,414	263,80
Accruals and tax reserve, etc.	387,405	116,01
Total current liabilities	$1,136,819	$1,429,81
Total liabilities	$4,681,753	$5,109,75

Arctics, cwt	.50a	.60
Inner tubes, mixed, cwt.....	3.75a	4.00
Inner tubes, red, cwt.....	4.50a	4.75
Tires, standard, mixed, ton....	18.00a	19.00
Inner tubes, No. 1, cwt.....	7.00a	7.25
Inner tubes, No. 2, cwt.....	3.50a	3.75

*Nominal. †Sold on sample only.

C. M. HALL LAMP REPORTS NEARLY 100% PROFIT GAIN

Detroit, July 18.—C. M. Hall Lamp Company reports for six months ended June 30, 1929, net profit of $815,722 after charges and Federal taxes, equal to $2.04 a share earned on 400,000 no-par shares of stock, compared with $419,902, or $1.04 a share, for first six months of 1928.

Net profit for second quarter was $404,173 after above charges, equal to $1.01 a share, which compares with $411,549, or $1.03 a share, in preceding quarter and $224,902, or 56 cents a share, in second quarter of 1928.

MIDLAND STEEL PRODUCTS REPORTS $1,344,630 NET

Cleveland, July 18.—The Midland Steel Products Company reports for the quarter ended June 30, 192[illegible] profit of $1,344,630 after interest and depreciation, but before Federal taxes, comparing with $1,003,558 in preceding quarter, and $892,813 in June quarter of 1928.

Profit for first six months of 192[illegible] totaled $2,348,188 before Federal taxes, against $1,523,364 in first half of previous year.

President E. J. Kulas stated that the Cleveland plant was running at capacity and that the Detroit plant was running at practically capacity on all lines but brakes. He said that on the company's new steeldraulic brake, the large expansion program now under way gives evidence of being fully required to take care of the expanded brake business.

MAJOR SPECIFICATIONS AND MECHANICAL DETAILS OF

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Am. La France Chief	2	3650	Own	6	3¾x5	33.0	Pw	Zen	Vac	Rem	Own	C	4	Tim	Wo	31.2	4	D	156	6200	32x6	32x6 D
Am. La France W	3–4	3850	Own 2 R	4	4¼x6	28.9	P&S	Zen	Vac	A B	Own	C	4	Own	D R	47.4	D	R	160	7200	S 36x5	S 36x5 D
Am. La France S	4–4½	3200	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	54.4	D	R	165	8900	S 36x6	S 36x6 D
Am. La France V	5	5500	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	54.4	D	R	165	9800	S 36x5	S 40x6 D
Am. La France Z	6½	5750	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	63.5	D	R	165	10000	S 36x7	S 40x7 D
Am. La France U	7½	6900	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	—	63.5	D	R	165	10500	S 36x7	S 40x8 D
Autocar S A	1½	2700	Own	6	3¾x4½	33.8	Pb	Zen	Vac	L-N	Br-L 35	U	4	Own S A	Sp	27.9	4	R	150	3900	32x6	32x6
Autocar S D	2	3000	Own	6	3¾x4½	33.8	Pb	Zen	Vac	L-N	Br-L 35	U	4	Own S D	D R	33.9	4	R	150	4850	32x6	32x6 D
†Autocar H	3	3750	Own	4	4½x5½	32.4	C S	Str	Vac	A B	Own T	U	4	Own H	D R	47.8	R	R	114	5800	34x5 S	36x10 S
†Autocar S H	3	4000	Own	6	4½x4¾	40.8	Pb	Str	Vac	R B	Own T	U	4	Own H	D R	47.8	R	R	114	5800	34x5 S	36x10 S
Autocar T	3	5000	Own	6	4⅜x4¾	45.9	Pb	Str	Vac	R B	Own T	U	4	Own T	D R	40.7	R	R	187	7100	36x8	36x8 D
†Autocar H S	3½	4100	Own	4	4½x4¾	32.4	C S	Str	Vac	A B	Own T	U	4	Own J	D R	55.2	R	R	114	6900	34x6 S	36x12 S
†Autocar S H S	3½	4400	Own	6	4⅜x5½	45.9	Pb	Str	Vac	R B	Own T	U	4	Own J	D R	55.2	R	R	114	7000	34x6 S	36x12 S
Autocar T S	3½	5350	Own	6	4⅜x4¾	45.9	Pb	Str	Vac	R B	Own T	U	4	Own J	D R	46.5	R	R	187	7100	36x8	36x8 D
Autocar S C M	5	5000	Own	6	4½x4¾	48.6	Pb	Str	Vac	R B	Own B	C	4	Own M	D R	72.1	R	R	162	8600	34x7 S	36x14 S
Brockway Junior	1	1195	Wis C	4	3¾x5	22.5	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.27	4	Tr	130	3100	30x5	30x5
Brockway J F	1	1195	Wis F	6	3¼x4¼	25.4	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.3	4	Tr	137	3450	30x5	30x5
Brockway C J B F	1½	1475	Wis F	6	3¼x4¼	25.4	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 54030	Sp	21.3	4	Tr	149	3650	32x6	32x6
Brockway E	1½	1765	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 30	U	3	Col 55001	Sp	21.0	4	Tr	139½	3650	32x6	32x6
Brockway E N	1½	1965	Wis N	6	3½x4¼	29.4	Pb	Zen	Vac	Aut	Br-L 35	U	4	Col 55001	Sp	31.3	4	Tr	155¾	4400	32x6	32x6
Brockway S	2	2450	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 35	U	4	Wis 4610	D R	38.79	R	Tr	150¼	5100	S 34x4	S 34x8
Brockway S Y	2	2950	Wis Y	6	3⅜x5	27.3	Pb	Zen	Vac	L-N	Br-L 35	U	4	Wis 4610	D R	35.3	4	Tr	151¾	4950	32x6	34x7
*Brockway K	3	3420	Con K	4	4⅛x5¼	27.2	Pw	Zen	Vac	Eis	Br-L 35	C	4	Tim 65700 S	Wo	41.5	R	D	154⅛	5855	S 36x5	S 36x10
Brockway K R	3	3625	Con L	4	4½x5½	32.4	Pw	Zen	Vac	Eis	Br-L 55	C	4	Tim 65700 S	Wo	36.38	R	D	160⅜	6290	S 36x5	S 36x10
Brockway K W	3	3950	Wis H	6	4 x5	38.2	Pb	Zen	Vac	L-N	Br-L 51	U	4	Wis 69300	D R	33.7	R	D	170	6920	34x7	D 34x7
*Brockway R	4	4300	Con L	4	4½x5½	32.4	Pw	Zen	Vac	Eis	Br-L 55	C	4	Tim 66600	Wo	46.8	R	R	164	7890	S 36x5	S 36x12
Brockway T	5–7	5200	Con B 7	4	5 x6	40.0	Pw	Zen	Vac	Eis	Br-L 60	C	4	Tim 68700	Wo	53.5	R	D	175	10065	S 36x6	S 40x14
Chevrolet	½	400	Own	6	3⅛x3¾	26.3	C S	Car	P	Rem	Own	U	3	Own	Sp	12.68	4	R	107	1815	4.50x20	4.50x20
Chevrolet	1½	545	Own	6	3⅛x3¾	26.3	C S	Car	P	Rem	Own	U	4	Own	Sp	30.05	4	R	131	2375	30x5	30x5
Commerce 20 Y	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	—	142	3900	B 30x5	B 30x3
Commerce S 11 Y	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	—	162	4300	B 30x5	D B 30x5
Commerce 30 Z	1½	2900	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	—	168	4700	B 34x5	D B 34x5
Commerce 40 Z	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vas	Aut	Br-L	U	4	Tim	Wo	34.8	4	—	168	4900	B 36x6	D B 36x6
Commerce 50 Z	2½	4415	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	—	175	7000	S 36x5	S 36x10
Commerce 60 Z	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	—	175	7100	S 36x5	S 36x12
Commerce 70 Z	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	—	175	8200	S 36x6	S 36x12
Commerce 80 Z	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	—	175	8400	S 36x6	S 36x14
Day Elder M F	1¼	1345	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Br-L 20A	U	3	Tim 52000 H	Sp	25.01	R	R	131	3100	30x5	30x5
Day Elder G F	1½	2050	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Br-L 20A	U	3	Tim 5622 H	Sp	29.30	R	R	156	3900	30x5	32x6
Day Elder H F	2	2500	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Br-L 35	U	4	Tim 63702 H	Wo	49.79	R	R	156	4400	S 34x4	S 34x7
Day Elder J F	3	3725	Con 18 R	6	4 x4½	38.4	Pb	Zen	Vac	Rem	Br-L 51	U	4	Tim 65000 H	Wo	37.20	R	R	156	6500	S 36x5	S 36x10
Day Elder K 6	4	4775	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	Rem	Br-L 60	C	4	Tim 66702 D	Wo	49.60	R	R	170	8500	S 36x5	S 36x12
Day Elder L 6	5-6	5300	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	Eis	Br-L 60	C	4	Tim 67700 D	Wo	64.60	R	R	170	10000	S 36x6	S 40x7 D
Diamond T 151	1	1095	Con 18 E	6	3⅜x4	27.3	Pb	Zen	Gra	Aut	Cov	U	3	Col	Sp	—	4	D	132	3200	30x5	30x5
Diamond T 290	1½	1475	Her W X A	6	3½x4½	27.3	Pb	Zen	Gra	Aut	Cov	U	4	Col	Sp	—	4	D	156¼	4160	30x5	30x5 D
Diamond T 302	2	1650	Her W X B	6	3¾x4½	33.8	Pb	Zen	Gra	Aut	Cov	U	4	Clark	Sp	—	4	D	157¾	4600	32x6	32x6 D
Diamond T 502	2½	2675	Her W X C	6	4 x4½	38.4	Pb	Zen	Gra	Aut	Cov	U	4	Tim	Wo	—	4	D	163	5850	34x7	34x7 D
Diamond T 505	2½	2875	Her W X C	6	4 x4½	38.4	Pb	Zen	Gra	Aut	Cov	U	4	Wis	D R	—	4	D	171½	5850	34x7	34x7 D
Diamond T 550	2½	2195	Her W X C	6	4 x4½	38.4	Pb	Zen	Gra	Aut	Cov	U	4	Clark	Sp	—	4	D	165	5400	32x6	32x6 D
Diamond T 601	3	3510	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Br-L	A	4	Tim	Wo	—	4	D	163½	6800	36x8	36x8 D
Diamond T 605	3	3810	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	U	4	Wis	D R	—	4	D	161½	6800	36x8	36x8 D
Diamond T 700	3½	4850	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	A	4	Tim	Wo	—	R	D	162	8100	S 36x5	S 36x10
Diamond T 800	4	5325	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Br-L	A	7	Own	Wo	—	4	D	195⅜	8300	36x8	4WH 36x8
Diamond T 1000	5	5500	Her Y X C 2	6	4½x4¾	48.6	Pb	Zen	Gra	Aut	Br-L	A	4	Tim	Wo	—	R	D	170½	10000	S 36x6	S 40x12
Diamond T 2500	10–12	9750	Wak	6	5 x5¾	60.0	Pb	Zen	Gra	Aut	Br-L	A	7	Tim	Wo	—	4	D	194	13100	S 36x7	S4W 36x12
Dodge Bros.	½	665	Own	4	3⅜x4¼	21.03	Pb	Stw	Vac	N E	Own	U	3	Own	Sp	15.2	4	D	110	1965	29x5.00 B	29x5.00 B
Dodge Bros.	¾	775	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	3	Own	Sp	17.4	4	D	120	2510	31x5.25 B	31x5.25 B
Dodge Bros.	1	995	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	W-G	U	4	Own	Sp	23.8	4	D	130	2920	30x5	30x5
Dodge Bros.	1	1065	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	W-G	U	4	Own	Sp	23.8	4	D	140	2955	30x5	30x5
Dodge Bros.	1½	1345	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	150	3695	32x6	32x6
Dodge Bros.	1½	1415	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	165	3810	32x6	32x6
Dodge Bros.	2	1445	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	114	3725	32x6	34x7
Dodge Bros.	2	1545	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	150	3930	32x6	34x7
Dodge Bros.	2	1615	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	165	4070	32x6	34x7
Dodge Bros.	3	1745	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	46.3	4	D	135	4225	32x6	32x6 D
Dover	¾	595	Own	6	2¾x4½	27.3	P&S	Mar	Vac	Aut	Own	U	3	Own	Sp	..	4	4	110	2150	30x5	31x5.50
Durant Com. Chassis	½	495	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	16.16	4	4	107	1670	28x4.75	28x4.75
Fargo Packet	½	545	Own	6	3 x4⅛	21.6	Pb	Car	Vac	Rem	Own	U	3	Own	Sp	14.29	4	Tr	—	1835	4.75x20	4.75x20
Fargo Clipper	¾	725	Own	6	3⅛x4¼	23.4	Pb	Str	Vac	Rem	Own	U	3	Own	Sp	14.29	4	Tr	—	2325	5.50x18	5.50x18
Fargo Freighter	1	795	Own	6	3 x4⅛	21.6	Pb	Str	Vac	Rem	Own	U	3	Own	Sp	37.19	4	Tr	133	2785	31x5½	32x6
Ford A A	1½	540	Own	4	3⅞x4¼	24.0	P&S	Zen	Gra	Own	Own	U	3	Own	Wo	*15.95	4	4	131½	2250	30x5	32x6
F. W. D.—H	2	3300	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Cotta	C	4	Own	St	38.1	4	k	121	5300	34x7	34x7
F. W. D.—H 6	2	3425	Wak	6	3½x4½	29.4	Pb	Zen	Vac	Eis	Br-L	U	4	Own	St	35.0	4	R	133	5500	34x7	34x7
F. W. D.—B	3	4200	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	3	Own	St	35.6	4	R	124	6460	36x6 S	36x6 S
F. W. D.—B 5	3	4525	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	5	Own	St	88.6	4	R	132	6800	36x6 S	36x6 S
F. W. D.—U 6	3½	4575	Wak	6	4 x4¾	38.6	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7200	36x6 S	36x6 S
F. W. D.—H T	2	3900	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	84.7	4	R	120	6000	36x8	36x8
F. W. D.—B T	3	4742	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	101.0	4	R	133¾	7700	40x7 S	40x5 S D
F. W. D.—U 4	3	4575	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7000	36x6 S	36x6 S
F. W. D.—X 6	6	6500	Wak	6	4¼x4¾	43.3	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	4	170	9500	36x8	36x8
Garford 20 Y	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	—	142	3900	B 30x5	B 30x5
Garford S 11 Y	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	—	162	4300	B 30x5	D B 30x5
Garford 30 Z	1½	2990	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	—	168	4700	B 34x5	D B 34x5
Garford 40 Z	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	—	168	4900	B 36x6	D B 36x6
Garford 50 Z	2½	4419	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	—	175	7000	S 36x5	S 36x10
Garford 60 Z	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	—	175	7100	S 36x5	S 36x12
Garford 70 Z	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	—	175	8200	S 36x6	S 36x12
Garford 80 Z	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	—	175	8400	S 36x6	S 36x14
Gramm Imp. Jr.	*9000	3785	——	6	4⅜x4¾	45.9	Pb	Zen	Vac	L-N	—	U	4	—	D R	—	4	R	210	6800	34x7	34x7 D
Gramm Imp. Sr.	*13000	4985	——	6	4¾x5¾	54.1	Pb	Zen	Vac	L-N	—	U	4	—	D R	—	4	R	236	9400	36x8	36x8 D
Gramm 263 N	1–1¼	1485	Lyc S	6	3¼x4½	25.3	Pb	Zen	Gra	Aut	Cov	U	3	Eat 1002	Sp	21.3	4	R	133	3485	30x5	32x6
Gramm 363 N	1½	1485	Lyc S	6	3¼x4½	25.3	Pb	Zen	Gra	Aut	Cov	U	3	Eat 1002	Sp	21.3	4	R	133	3485	30x5	32x6
Gramm 463 N	2	1885	Lyc S	6	3¼x4½	25.3	Pb	Zen	Gra	Aut	Cov	U	3	Eat 1504	Sp	25.3	4	R	133	3800	32x6	34x7
Gramm 564 N	2½	2940	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Gra	Aut	Ful G U	U	3	Wis 6617	D R	25.4	4	R	133	4800	32x6	32x6 D
Gramm 35	3	4160	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	Aut	Ful H	C	8	Wis 8800	D R	115.5	4	R	153	7100	36x5 S	36x10 S
Gramm 35	3	4160	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful H	C	8	Wis 8800	D R	115.5	4	R	153	7100	36x5 S	36x10 S
Gramm 38—Low Bed	3	4160	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful G U	C	8	Wis 67310	D R	33.1	4	R	153	7100	36x5 S	36x10 S
Gramm 45	4	4735	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	Aut	Ful H	C	8	Wis 1450	D R	128.0	4	R	150	7600	36x5 S	36x12 S
Gramm 45	4	4735	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful H	C	8	Wis 1450	D R	128.0	4	R	153	7600	36x5 S	36x12 S
Gramm 48—Low Bed	4	4735	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful G U	U	4	Wis 1250	D R	34.2	4	R	133	7600	36x5 S	36x12 S
Gramm 60	5	5370	Her G	4	4¾x5¾	36.1	Pb	Zen	Vac	Aut	Ful H	C	8	Wis 1700 •	D R	133.4	4	R	153	8700	36x6 S	36x14 S
Gramm 60	5	5370	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful G U	U	8	Wis 1700	D R	133.4	4	R	153	8700	36x6 S	36x14 S
GMC T 11	*3800	625	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Own	U	3	Own	Sp	14.7	4	D	109⅝	1980	19x5.00 B	19x5.50 B
GMC T 19 (2003)	*6000	895	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Own	U	4	Tim 5261 Bx	Sp	34.1	4	D	127¾	2925	20x5.50 B	32x6
*GMC T 30 (3003)	*8000	1395	Buick Std	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Own	U	4	Eat 1606	Sp	28.6	4	D	136	4075	20x6.00 B	34x7
*GMC T 42 (4003)	*10000	1685	Buick Std	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Own	U	4	Own	Sp	33.4	4	D	136	4510	20x7.00 B	36x8
*†GMC T 60 (5003)	*14500	2800	Buick Mst	6	3⅝x5	31.5	Pb	Mar	P	Rem	Own	U	4	Tim 65706 N	Wo	44.8	4	D	140	6090	36x6	36x6 D
*GMC K 102 (6001)	*28000	4250	Own 89	4	4½x6½	32.4	Pw	Mar	Vac	Eis	Own	C	7	Tim 67600	Wo	86.3	R	R	160	9520	36x6 S	40x14 S
*Hahn 24	1	1345	Her O	4	4 x5	25.6	Pb	Zen	Vac	Aut	Br-L 31	U	3	Eat 1002	Sp	—	R	R	138	3100	30x5	30x5
*Hahn 34	1½	2080	Her O	4	4 x5	25.6	Pb	Zen	Vac	Aut	Br-L 31	U	3	Eat 1504	Sp	—	R	R	150	3750	32x6	32x6
Hahn 465	2	2740	Con 6 B	6	3¾x5	33.5	Pb	Zen	Vac	Aut	Br-L 35	U	4	Eat 1504	Sp	—	R	R	160½	4300	32x6	34x7
Hahn 54	2½	3300	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	R B	Br-L 51	U	4	Tim 65000	Wo	—	R	R	144	5600	36x4 S	36x8 S
†Hahn 56	2½	3440	Con 6 B	6	3¾x5	33.8	Pb	Zen	Vac	Rem	Br-L 51	U	4	Eat 2252	Sp	—	R	D	160	5300	32x6	32x6 D
Hahn L	3	3600	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	R B	Br-L 51	U	4	Tim 65704	Sp	—	R	R	149	5900	36x5 S	36x5 S D

1929 COMMERCIAL CARS BUILT IN THE UNITED STATES

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Hahn 76	3½	4790	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Vac	L-N	Br-L 51	U	4	Tim 65704	Wo	—	R	R	196	6500	34x7	34x7 D
Hahn M	4	4250	Her G	4	4¾x5¾	36.5	Pb	Zen	Vac	R B	Br-L 60	C	4	Tim 66700	Wo	—	R	R	160	7600	36x5 S	36x12 S
Hahn R	5	5100	Her G	4	4¾x5¾	36.5	Pb	Zen	Vac	R B	Br-L 60	C	4	Tim 66700	Wo	—	R	R	162	8800	36x6 S	40x6 S D
Hahn N	6	5200	Her G	4	4¾x5¾	36.4	Pb	Zen	Vac	R B	Br-L 60	C	4	Tim 66700	Wo	—	R	R	162	9200	36x6 S	40x6 S D
Indiana 200	1	1195	Wis F	6	3¼x4½	25.3	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36000	Sp	20.71	4	Tr	137	3400	30x5	30x5
Indiana 300	1½	1475	Wis F	6	3¼x5¼	25.3	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 54030	Sp	21.26	4	Tr	149	3650	32x6	32x6
Indiana 111 X W	2	1850	Her Ox	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Wis 4611	Sp	36.60	R	Tr	120	3830	32x6	32x6 D
Indiana 400	2	2495	Wis Y	6	3⅜x5	27.3	Pb	Str	Vac	Aut	Br-L 35	U	4	Cla B 506	Sp	30.33	4	Tr	157	4800	32x6	34x7
Indiana 115 A	2½	2740	Her Ox	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	42.80	R	Tr	132	5000	32x6	34x7 D
Indiana 615 A	2½	3070	Wis Y	6	3⅜x5	27.3	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	30.33	R	Tr	136	5190	32x6	34x7 D
Indiana 126	3	3495	Her L	4	4½x5¾	32.4	Pb	Str	Vac	Eis	Br-L 557	C	7	Tim 65704	Wo	80.7	R	Js	162½	7400	36x5	36x10 S
Indiana 127	3	3190	Her K	4	4¼x5¾	28.9	Pb	Str	Vac	Eis	Br-L 51	U	5	Cla B 720	Sp	41.72	R	R	141	6490	32x6	34x7 D
Indiana 626	3	4185	Wis H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 55	C	7	Tim 65704	Wo	80.7	R	Js	168½	7625	36x6 S	36x10 S
Indiana 627	3	3725	Wis H	6	4 x5	38.4	Pb	Str	Vac	Aut	Br-L 55	U	4	Cla B 720	Sp	42.80	R	R	162½	6500	36x5 S	36x10 S
Indiana 127 A W	3	3625	Her K	4	4¼x5¾	28.9	Pb	Str	Vac	Eis	Br-L 51	U	5	Wis 69311	Sp	41.72	R	Tr	141	6800	32x6	34x7 D
Indiana 627 A W	3	3925	Wis H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 51	U	5	Wis 69311	Sp	41.72	R	Tr	147	6800	32x6	34x7 D
Indiana 138	4	4380	Her L	4	4½x5¾	32.4	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	83.1	R	R	162½	7850	36x5	36x12 S
Indiana 638	4	4955	Wis H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	83.1	R	R	168½	8100	36x5	36x12 S
Indiana 41	5	5460	Her G	4	4¾x5¾	36.1	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	95.0	R	R	172	9600	36x6	40x12 S
Int. Harvester Sp. Del.	¾	720	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	Rem	Mec	U	3	Eat 502 R	Sp	15.1	4	4	124	2200	30x5.25	30x5.25
Int. Harv. 6 Spd. Spec.	1	820	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	Rem	Mec	U	3	Eat 1124	Sp	*52.6	4	4	124	2430	30x5	30x5
Int. Harvester S-24	1¼	1160	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1002	Sp	21.3	4	4	130	3200	32x4½	30x5
Int. Harvester S-26	1¼	1310	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1002	Sp	21.3	4	4	130	3250	32x4½	30x5
Int. Harvester SF-34	1½	1450	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	140	3520	30x5	32x6
Int. Harvester SF-36	1½	1600	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	140	3570	30x5	32x6
Int. Harvester SD-44	2	1590	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	A B	Own	U	4	Eat 2002	Sp	40.6	4	4	117	3700	30x5	32x6
Int. Harvester SD-46	2	1740	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	A B	Own	U	4	Eat 2002	Sp	40.6	4	4	117	3750	30x5	32x6
Int. Harvester SF-46	2	1950	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	4	Eat 2002	Sp	40.6	4	4	140	4000	32x6	34x7
Int. Harvester 54-C	2½	3200	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 428	Ch	51.8	R	D	140	6400	36x5	36x10
Int. Harvester 54	2½	3550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Eat 54 65000	D R	53.7	R	D	140	6345	36x5	36x8
Int. Harvester 74-C	3½	4550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 427	Ch	*86.0	R	D	154	8715	36x6	40x12
Int. Harvester 74	3½	4550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Eat 74 100000	D R	61.6	R	D	160	8175	36x6	40x12
Int. Harvester 104-C	5	4800	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 427	Ch	86.0	R	D	154	8890	36x6	40x14
Int. Harvester HS-54	2½	3850	H-S 151	4	4¼x5½	28.9	Pb	Zen	Vac	R B	Own	U	5	Eat 54 65000	D R	60.5	4	4	*148	8000	36x5	36x8
Int. Harvester HS-54-C	2½	3850	do 151	4	4¼x5½	28.9	Pb	Zen	Vac	R B	Own	U	5	Own A M 428	Ch	63.8	4	4	*148	8665	36x5	36x10
Int. Harvester HS-74	3½	4850	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Eat 74 100000	D R	70.5	4	4	*160	10700	36x6	40x12
Int. Harvester HS-74-C	3½	4850	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Own A M 427	Ch	79.1	4	4	*160	11000	36x6	40x12
Int. Harv'st'r HS-104-C	5	5500	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Own A M 427	Ch	90.5	4	4	*160	11095	36x6	40x14
*Larrabee 20	1	1595	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Gra	Rem	Br-L	U	3	Col	Sp	4.15	4	D	142	4170	30x5	30x5
*Larrabee 30	1½	1875	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Gra	Rem	Br-L	U	3	Col	Sp	4.15	4	D	161	4550	32x6	32x6
*Larrabee 40	2	2965	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Wis	D R	5.35	4	D	176	5950	32x6	32x6 D
*Larrabee 50	2½	3285	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Wis	D R	5.35	4	D	183	6030	32x6	32x6 D
*Larrabee 60	3	3980	Con 18 R	6	4 x4½	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Tim	Wo	5.35	4	D	195	7140	34x7	34x7 D
*Larrabee 70	3½	4600	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	Gra	Rem	Br-L	C	7	Tim	Wo	9.5	4	D	205	7740	34x7	34x7 D
Mack BB	1½	3500	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	Hyp.	Opt.	4	D	165½	——	32x6	32x6 D
Mack BB	1½	3600	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	Hyp.	Opt.	4	D	177½	——	32x6	32x6 D
Mack AB	1½-2	3100	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	Ch.	Opt.	R	D	2-Opt.	——	36x4 S	36x7 S
Mack AB	1½-2	3550	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	D R	Opt.	R	D	2-Opt.	——	36x4 S	36x7 S
Mack AB	2½-3	3500	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	Ch.	Opt.	R	D	2-Opt.	——	36x4 S	36x8 S
Mack AB	2½-3	3950	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	D R	Opt.	R	D	2-Opt.	——	36x4 S	36x8 S
Mack BJ	3-4	5800	Own	6	4½x5½	48.6	P&S	Str	Vac	N E	Own	C	4	Own	D R	Opt.	4	D	3-Opt.	——	36x8	36x8 D
Mack AK	3½-5	5150	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4	Js	3-Opt.	——	36x5 S	36x5 D S
Mack AK	3½-5	5250	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	C	4	Own	D R	Opt.	4	D	3-Opt.	——	36x5 S	36x5 D S
Mack AC	3½-5	4950	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	3-Opt.	——	36x5 S	40x10 S
Mack AC	5½-7	5500	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	3-Opt.	——	36x6 S	40x12 S
Mack AC	7½	6000	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	3-Opt.	——	36x7 S	40x14 S
Mack AP	7½	9500	Own	6	5 x6	60.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	R	Js	191	——	36x7 S	40x8 D S
Mack AB Tractor	5-6	3500	Own	4	4½x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	Ch.	Opt.	R	D	122½	——	36x4 S	36x4 D S
Mack AK Tractor	7-10	5150	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4	Js	128	——	34x5 S	36x5 D S
Mack AC Tractor	7-10	4950	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	128	——	34x5 S	36x5 D S
Mack AC Tractor	11-14	5500	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	128	——	34x6 S	36x6 D S
Mack AC Tractor	15	6000	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	128	——	34x7 S	36x7 D S
Mack AP Tractor	15	9500	Own	6	5 x6	60.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	R	Js	147	——	34x7 S	36x7 D S
Mack AC 6-wheel	10	7500	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4 R	Js	2-Opt.	——	36x7 S	40x12 S
Mack AP 6-wheel	10	12000	Own	6	5 x6	60.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4 R	Js	2-Opt.	——	36x7	40x12 S
Moreland A-6	*6800	1275	Con 34 L	6	2⅞x4¾	19.84	Pb	Zen	Vac	Aut	Br-L 20	U	4	Tim 52000 H	Sp	24.17	4	D	134	3000	32x6.75	32x6.75
Moreland R R-6	*9300	1850	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 54000 H	Sp	32.95	4	D	158½	4000	32x6	32x6
Moreland B-6	*12000	2200	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 63721 H	Wo	34.8	4	D	158½	4500	34x7	34x7
Moreland E-6	*15000	3600	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	4	Tim 65000 H	Wo	34.8	*4	D	182	6000	34x7	34x7 D
Moreland Ex. 6	*19000	3750	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	5	Tim 65704 N	Wo	46.0	*4	D	182	6500	36x4 S	36x8 S
Moreland E D -6	*23000	4900	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	5	Own	Wo	52.2	*4	D	196	8500	36x8	36x8
Moreland H-6	*22000	4650	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L 55	C	7	Tim 66702 W	Wo	82.3	*R	D	196	8000	36x5 S	36x10 S
Moreland H D S-6	*30000	5850	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L 60	C	7	Own	Wo	81.6	*4	D	220	10500	36x6 S	36x8
Moreland S D-6	*34000	6450	Her YXC 2	6	4½x4¾	48.6	Pb	Zen	P	Aut	Br-L 60	C	7	Own	Wo	89.0	*4	D	221	11500	36x7 S	36x10 S
Moreland T T-6	*34000	8000	Con 15 H	6	4½x5¾	48.6	Pw	Str	P	Aut	Br-L 70	C	7	Own	Wo	98.5	*4	D	221	12500	36x7 S	36x10 S
*Fleet Arrow F A-1	1½-2	2450	Own F A	6	3½x5	29.5	Pb	Str	A P	Rem	Own	U	3	Own	Sp	33.3	4	Tr	140	3950	32x6.00	34x7
*Pierce-Arrow F A-1	1½-2	2450	Own	6	3½x5	29.4	Pw	Str	P F	Del	Own	U	3	Tim	St	21.4	4	Tr	140	4100	32x6	32x6 D
*Pierce-Arrow X A-1	2	3500	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	4	Own	Wo	44.2	D	R	150	6750	36x4	36x5 D S
*Pierce-Arrow X B-1	3	3750	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	4	Own	Wo	48.1	D	R	150	6830	36x5	36x5 D S
*Pierce-Arrow H B-1	5	4500	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	7	Own	Wo	95.0	D	R	156	8400	36x5	36x6 D S
*†PierceArrow W C-1	4	5100	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	41.5	D	R	162	8780	36x5	36x6 D S
*†Pierce-Arrow R D-1	5	5400	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	40.5	D	R	162	9440	36x6	36x7 D S
*†Pierce-Arrow R F-1	7½	5600	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	51.9	D	R	168	10320	36x6	40x8 D S
†Pierce-Arrow R F-T	7½	5600	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	51.9	D	R	132	940	36x6	36x8 D S
Relay 20 B	1	1700	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	25.7	4	—	142	4100	B 30x5	B 30x5
Relay S 11 B	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	30.0	4	—	162	4500	B 30x5	D B 30x5
Relay 30 A	1½	2990	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	—	168	5300	B 34x5	D B 34x5
Relay 40 A	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	—	168	5500	B 36x6	D B 36x6
Relay 50 C	2½	4415	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	—	175	7300	B 36x6	S 36x10
Relay 60 C	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	—	175	7450	B 36x6	S 36x12
Relay 70 C	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Cov	C	8	Own	Relay	84.2	R	—	175	8600	B 36x6	S 40x12
Relay 80 C	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Cov	C	8	Own	Relay	84.2	R	—	175	8800	B 36x6	S 40x14
Reo B A	½	895	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	N E	W-G	U	3	Sal	Sp	14.63	4	Tr	115	2290	28x5.25	28x5.25
Reo D A	1	995	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	N E	W-G	U	3	Own	Sp	18.4	4	Tr	123	2755	30x5	30x5
Reo D C	1	1075	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	N E	W-G	U	3	Own	Sp	18.4	4	Tr	138	2850	30x5	30x5
Reo F A	1½	1295	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	22.96	4	Tr	137	3525	32x6	32x6
Reo F E	1½	1395	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	22.96	4	Tr	152	3700	32x6	32x6
Reo F F	1½	1395	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	22.96	4	Tr	156	3750	32x6	32x6
Reo F C	2	1595	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	37.62	4	Tr	152	4025	32x6	32x6 D
Reo F D	2	1695	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	37.62	4	Tr	168	4075	32x6	32x6 D
Reo G A	3	2035	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	41.05	4	Tr	163	4625	32x6	32x6 D
Reo G C	3	2140	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	41.05	4	Tr	179	4850	32x6	32x6 D
Reo G D	3	1985	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	46.2	4	Tr	134	4570	32x6	32x6 D
Republic Fleetmaster	*7000	1295	Lyc	6	3¼x4½		Pb	Zen	Vac				4				4	Tr	144	3300	6.00x20 B	32x6
Republic F-1	*12000	2195	Lyc	6	3¼x4½		Pb	Zen	Vac				4				4	Tr	155	4850	32x6	32x6 D
Republic H-1	*15000	2985	Lyc	6	3⅞x5		Pb	Zen	Vac				4				4	Tr	163	5750	34x7	34x7 D
Republic L-1	*18000	3595	Lyc	6	3⅞x5		Pb	Zen	Vac				4		D R	48.0	4	Tr	180	6400	36x8	36x8 D
Republic M-1	*20000	3800	Waukesha	6	4 x4¾		Pb	Zen	Vac				5		D R	48.0	4	Tr	171	7000	36x8	36x8 D

New Accessory Dealers

MISSOURI

Joplin, Mo., July 18.—Construction of the last unit of a $26,000 "one-stop" service business has been begun at the southeast corner of 8th and Main Streets by I. W. DeWitt, local tire dealer. Recently DeWitt built on the north fifty feet of his 100-foot lot a $11,000 glazed-tile oil station and service shed, which he has leased to the Independent Oil and Gas Company. Now he is building a $15,000 building of the same material to house a tourist supply store and his own tire business.

VIRGINIA

Richmond, Va., July 18 (U. T. P. S.).—The Rocky Mount Filling Station, Inc., of Rocky Mount, Va., with maximum capital of $25,000, has been granted a charter to deal in oil, gas and automobile accessories. N. P. Angle, of Rocky Mount, is president of the concern. B. A. Davis, Jr., of Rocky Mount, is attorney for the company.

TENNESSEE

Memphis, Tenn., July 18.—John T. Mahoney's new "tire mart," 3d Street and Linden Avenue, has opened for business. L. W. Kennedy, veteran tire man, is manager of the new store, which is handling the Marathon line.

KENTUCKY

Louisville, Ky., July 18.—Sears, Roebuck & Co. of Chicago, which is establishing a new retail store on Broadway at Eighth, Louisville, where a large new building has been erected by the company, is getting ready to start operations. A large and complete automobile accessory and supply department, handling tires, batteries and general equipment will be in the basement.

Major Specifications and Mechanical Details of 1929 Commercial Cars Built in the United States

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Rugby Lt. Dely. Panel	½	*775	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	14.79	4	4	107	2325f	28x4.75	28x4.75
Rugby Fast Mail Panel	¾	*975	Con	6	2⅞x4¾	19.8	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.79	4	4	110	2600f	29x5	29x5
Rugby Express	1¼	975	Con	6	2¾x4¾	18.2	Pb	Til	Vac	Aut	Own	C	4	Own	Sp	22.4	4	4	128	2530	30x5	30x5
Rugby Mod. X	1½	680	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	24.16	4	4	124	2175	29x5	30x5
Seldon 7	¾-1	1098	Con 29 L	6	2⅞x4¾	19.8	Pb	Zen	Vac	Aut	Br-L	U	3	Tim	Sp	23.2	4	D	124	3100	30x5	30x5
Seldon 17C	1-1½	1398	Con 18 E	6	3⅜x4	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.0	4	D	142	3750	30x5	30x5
Seldon 37C	2-2½	1950	Con 15 C	6	3⅜x4⅝	27.3	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	31.0	4	D	151	4600	30x5	30x5 D
Seldon 39C	2½-3	2898	Con 16 R	6	4 x4⅛	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	39.5	4	D	164	5800	32x6	32x6 D
Seldon 47CD	3½-4	3900	Con 18 R	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Wis	D R	41.7	4	D	151	6900	34x7	34x7 D
Seldon 67C	4-5	4950	Con 21 R	6	4⅜x4¾	45.9	Pb	Str	Vac	Aut		C	7	Wis	D R	95.7	4	D	151	7500	36x8	36x8 D
Seldon 77B	5-7	5800	Bud G F 6	6	4¾x6	54.1	Pb	Str	Vac			C	7	Wis	D R	95.7	R	D	171	8842	36x8	S 36x12
Service 20 Y	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	—	142	3900	B 30x5	B 30x5
Service S 11 Y	1½	1990	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	—	162	4300	B 30x5	D B 30x5
Service 40 Z	2	3240	Bud D S 6	6	3½x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	—	168	4900	B 36x6	D B 36x6
Service 60 Z	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	—	175	7100	S 36x5	S 36x12
Service 80 Z	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	—	175	8400	S 36x6	S 36x14
Standard 2½ K	2½-3½	3200	Con K 4	4	4⅛x5¼	27.2	Pb	Str	Vac	Aut	Br-L 35	C	4	Tim 65600	Sp Wo	34.8	R	D	147	5400	36x5 S	36x8 S
Standard 3½ K	3½-5	4350	Con L 4	4	4½x5½	32.4	Pb	Str	Vac	Aut	Br-L 55	C	7	Tim 66700	Sp Wo	83.0	R	D	160	7485	36x5 S	36x12 S
Standard 5 K	5-7	5250	Con B 5	4	4¾x6	36.1	Pb	Str	Vac	Aut	Br-L 60	C	7	Tim 68700	Sp Wo	83.6	R	D	164	8700	36x6 S	40x14 S
*Stewart Buddy 21	¾	895	Lyc W S G	6	2⅞x4¾	19.8	Pb	Str	Gra	Rem	W-G	U	3	Sal	Sp	30.0	R	D	118	2694	30x5.50	30x5.50
*Stewart Buddy 21 X	1	995	Lyc W S G	6	2⅞x4¾	19.8	Pb	Str	Vac	Rem	W-G	U	3	Sal	Sp	30.0	4	D	128	2806	30x5	30x5
*Stewart 16	1¼	1295	Lyc C T	4	3¾x5	22.5	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	24.0	4	D	130	3326	32x6	32x6
*Stewart 16 X	1¼	1295	Lyc 4 S L	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	4	Cla	Sp	24.0	4	D	130	3326	32x6	32x6
*Stewart 24	1½	1645	Lyc C 4 W	4	4 x5	25.6	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	27.3	4	D	145	3917	30x5	30x5 D
*Stewart 24 X	1½	1645	Lyc 4 S L	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	4	Cla	Sp	27.3	4	D	145	3917	30x5	30x5 D
*Stewart 25	2	1975	Lyc C 4 W	4	4 x5	25.6	Pb	Str	Vac	Rem	Ful	U	4	Tim	Sp	27.3	4	D	145	4088	32x6	34x7
*Stewart 25 X	2	1975	Lyc 4 S L	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	4	Tim	Sp	27.3	4	D	145	4088	32x6	34x7
*Stewart 25 W	2	2095	Lyc C 4 W	4	4 x5	25.6	Pb	Str	Vac	Rem	Ful	U	4	Tim	Sp	29.0	4	D	146	4160	32x6	34x7
*Stewart 25 X W	2	2095	Lyc 4 S L	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	145	4160	32x6	34x7
Stewart 26 X	2	2190	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Sp	29.0	4	D	145	5020	32x6	32x6 D
Stewart 26 X W	2	2290	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	165	5095	32x6	32x6 D
*Stewart 18 X	2½	2690	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	165	5788	32x6	32x6 D
Stewart 19 X	3½	3690	Lyc F	6	3⅞x5	36.2	Pw	Str	Vac	Rem	Ful	C	12	Tim	Wo	105.1	4	D	165	6990	36x5	36x10
*Stewart 22 X	4	4200	Lyc F	6	3⅞x5	36.2	Pw	Str	Vac	Rem	Ful	U	12	Tim	Wo	34.8	4	D	165	7990	36x5	36x12
Studebaker G K-N	1	1095	Own	6	3⅜x4⅝	27.3	P C	Str	P	Rem	Own	U	3	Own	Sp	13.7	4	Js	146	2830	30x5	30x5
Studebaker "77" Jr.	*3½	2585	Own	8	3½x4⅜	39.2	P C	Str	P	Rem	Ful	U	3	Eat	Sp	19.8	4	Js	158	4745	20x6.75 B	20x6.75 B
Studebaker "88" Spec.	*3½	2935	Own	8	3½x4⅜	39.2	P C	Str	P	Rem	Ful	U	3	Eat	Sp	19.8	4	Js	184	4745	20x7.50 B	20x7.50
Studebaker "99" H. D.	*4	3485	Own	8	3½x4⅜	39.2	P C	Str	P	Rem	Ful	U	4	Eat	Sp	24.6	4	Js	184	5210	20x7.50 B	20x7.50
Stud. Ersk. Mod. 52-B	½	675	Con 9 F	6	2¾x4½	18.0	P C	Sch	Vac	Rem	W-G	U	3	Tim	Sp	15.6	4	4	109	——	30x5	30x5
Victor 35	1½	1895	Con	6	3⅜x4	27.3	Pb	Zen	Vac	Rem	Cov	U	3	Tim	Sp	—	4	D	144	3200	30x5	30x5 D
Victor 45	2½	2495	Her	6	3¾x4½	33.7	Pb	Zen	Vac	Rem	Ful	U	4	Wis	D R	—	4	D	148	4500	32x6	32x6 D
Victor 75	3½	3895	Her	6	4 x4½	38.4	Pb	Zen	Vac	Rem	Ful	U	4	Wis	D R	—	4	D	162	6000	34x7	34x7 D
Whippet 96 A	½	380	Own 96 A	4	3½x4¾	15.6	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.75	4	R	103¼	1659	28x4.75	28x4.75
Whippet 6 C-101	1½	645	Own 98 A	6	3⅛x3⅞	23.4	Pb	Til	Vac	Aut	Ful	U	4	Cla-B 364	Sp	35.5	4	R	131	2540	30x5	30x5
†White 15 B	1	1545	Own G K A	4	3¾x5⅛	22.5	C S	Zen	Vac	L-N	Own	C	4	Own	Sp	18.6	R	R	133½	3242	30x5	30x5
†White 57	1¼	2725	Own G R C	4	4 x5¾	25.6	Pw	Zen	Vac	L-N	Own	U	4	Own	Sp	19.3	R	R	146	3774	32x6	32x6
†White 20 A	1½	2125	Own G K A	4	3¾x5⅛	22.5	C S	Zen	Vac	L-N	Own	C	4	Own	D R	32.1	R	R	145½	4412	34x5	34x5 D P
†White 56	2	3125	Own G R C	4	4 x5¾	25.6	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	26.2	R	D	165	5157	36x4 S	36x7 S
†White 51 A	2½	3750	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	35.5	R	D	170	6256	36x5 S	36x8 S
†White 55	3½	4650	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	66.1	D	R	174	8402	36x5 S	40x5 S D
†White 52 T	3½	4700	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	76.5	D	R	129½	8126	36x5 S	40x5 S D
†White 52	5	5100	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	5	Own	I G	92.3	D	R	174	9184	36x6 S	40x12 S
†*White 58	3	4400	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	49.5	D	A	180	7400	36x5 S	36x5 S D
White 60		1850	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	Rem	Own	U	3	Own	Sp	17.9	4	D	138	3738	30x5	30x5
White 61	1½	2450	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	Rem	Own	U	4	Own	Sp	23.4	4	D	148	——	30x5	30x5 D
Willys-Knight 15	1½	1545	Own K G T	6	2⅞x4⅜	20.7	Pb	Til	Vac	Aut	Ful D U	U	3	Eat 1002	Sp	26.3	4	R	134	3300	30x5	32x6
Willys-Knight 16	1½	1595	Own K G T	6	2⅞x4⅜	20.7	Pb	Til	Vac	Aut	Ful D U	U	3	Eat 1002	Sp	26.3	4	R	151	3400	30x5	32x6
Willys-Knight 20	2	1945	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful D U	U	3	Eat 1504	Sp	28.4	4	R	150	3800	32x6	34x7
Willys-Knight 21	2	1995	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful D U	U	3	Eat 1504	Sp	28.4	4	R	164	3900	32x6	34x7
Willys-Knight 25	2½	2545	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful G U	U	4	Wis 6617 B	D R	30.3	4	R	150	4920	32x6	32x6 D
Willys-Knight 26	2½	2595	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful G U	U	4	Wis 6617 B	D R	30.3	4	R	164	5020	32x6	32x6 D

GENERAL NOTATIONS

*†**REFERENCE MARKS** apply to individual lines only and explanations are given under the subdivision for each company in the **"SPECIAL NOTATIONS."**

CAPACITIES given in this table are in tons or fractions of tons. Bus capacities are given in number of passengers. *Shows maximum allowable gross weight.

TIRE EQUIPMENT where not otherwise indicated is solid.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

ENGINE—Bud, Buda; Con, Continental; Her, Hercules; Kgt, Knight; Lyc, Lycoming; Wak, Waukesha; Wis, Wisconsin.

LUBRICATION—Pb, pressure lubrication to main and connecting rod bearings; Pw, full pressure lubrication to all bearings, including wrist-pins; P&S, pressure with splash; CS, circulating splash; Sp, Splash.

CARBURETOR—Car, Carter; Hol, Holley; Joh, Johnson; Mar, Marvel; Sch, Wheeler-Schebler; Str, Stromberg; Stw, Detroit Lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, Gravity; Pre, Pressure; Vac, Vacuum tank; P, Fuel pump, Auto-P, Auto pulse; E, Electric pump.

IGNITION — AB, American-Bosch; Aut, Electric Auto-Lite; Apo, Apollo; Del, Dayton Engine Laboratory; Eis, Eisemann; L-N, Leece-Neville; N-E, North East; RB, Robert Bosch; Rem, Delco-Remy; Spf, Splitdorf.

TRANSMISSION—Br L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G Warner Gear.

LOCATION—C, Center, Amid; U, in unit with engine; J, Jackshaft.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Sal, Salisbury; Tim, Timken; Wis, Wisconsin.

FINAL DRIVE—St, Straight bevel; Sp, Spiral bevel; Wo, Worm; DR Double Reduction; Ch, Chain; IG, Internal Gear.

BRAKES—Js, Jackshaft; R, Rear wheels; D, Drive shaft; 4 Four-wheel; Tr, Transmission; W, Westinghouse air brake.

TIRES—B, Balloon; D, Dual; S, Solid.

SPECIAL NOTATIONS

AMERICAN-LA FRANCE

*Chief model also available as 2½-ton model, 34x7 tire, dual rear, weight 6,400. Price $3,900.

AUTOCAR

†Engines in these models are located under the driver's seat.

DURANT LINE

*Price includes panel body.

G. M. C. LINE

*Capacity given in all cases is maximum allowable total gross weight, including chassis, cab, body and load.

Model T-19 is available in six standard types with different tire and wheel equipment. Each has a specified straight rating capacity. Three types have 127¾-inch wheel base and three have 145¾-inch wheel base.

Model T-30 is built in nine types, varying in capacity, tire and wheel equipment on three wheel bases—126, 152, 164 inches.

Model T-42 is built in twelve types, varying in capacity, tire and wheel equipment on four wheel bases—136, 152, 164, 175 inches.

Model T-60 is built in twelve types, varying in capacity, tire and wheel equipment on four wheel bases—140, 160, 180, 200 inches.

Model K-102 is also built as type 6002 with the same specifications except on 184-inch wheel base. Price $4,350.

FLEET-ARROW LINE

*Model F. A. 1 is also available as Model F. A. 2, at $2,500 on wheel base of 160 inches, weight 3,975 lbs., and as Model F. A. 3, at $2,550, with seven speed transmission, on 180-inch wheelbase, weight, 3,985 lbs.

HAHN LINE

*Model 23 also available as Model 26, priced $1,495, on 144-inch wheel base, with Buda H. S. engine, 6-cyl. 3⅜x4½ inches rated 27.3 h.p., weight 3,200 lbs.

*Model 34 also available as Model 36, with Buda H. S. 6 engine (described above), weight 3,850 lbs.

*Model 44 also available as Model 46, priced $2,410, on 156-inch wheel base, with Buda H. S. 6 engine, as in Model 26, weight 4,200 lbs.

†Model 56 also available on 171-inch wheel base.

INTERNATIONAL HARVESTER LINE

*Model HS-54 also available in the following wheel bases, 130-inch tractor, 170, 185 and 200-inch.

*Model HS-54-C also available in the following wheel bases, 130-inch tractor 170, 185 and 200-inch.

†Frame is reinforced with inserted channels in each side rail, extending from dash to rear end.

*Model HS-74 also available in the following wheel bases, 144-inch tractor, 185, 210 and 235-inch.

*Models HS-74-C and HS-104-C also available in the following wheel bases, 146-inch tractor, 185, 210 and 235-inch.

All Model HS heavy-duty International truck models are equipped with built-in vibration dampered clutches.

LARRABEE

*Note—Bevel gear, worm or double reduction drive rear axle available in models 40 and 50. Bevel or double reduction axles available in 40. Worm or double reduction axles in 60 and 70. Three or more wheel bases in each model. All Larrabee models have hydraulic brakes; 40 up have vacuum booster.

MACK LINE

Other wheelbases furnished on all truck models.

On 6-wheel jobs, 4 rear wheels driven by chains, foot brake on 4 rear wheels.

Hyp.—Hypoid drive, single reduction.

PIERCE-ARROW LINE

*Model FA1 also available as Model FA2, at $2,550 on 160-inch wheel base, weight 4,150 lbs., and also as Model FA3, at $2,250 on 180-inch wheel base, weight 4,200 lbs.

*Model XA1 also available as Model XA2, at $3,550 on 162-inch wheel base, weight 6,800 lbs.

*Model XB1 is also available as Model XB2, at $3,800 on 180-inch wheel base, weight 6,900 lbs.

*Model HB1 is also available as Model HB2, at $4,550 on 180-inch wheel base, weight 8,500 lbs., and also as Model HB3, at $4,600 on 198-inch wheel base, weight 8,700 lbs.

*Model WC1 is also available as Model WC2, at $5,150 on 180-inch wheel base, weight 8,950 lbs., and also as Model WC3, at $5,250 on 198-inch wheel base, weight 9,050 lbs.

*Model RD1 is also available as Model RD2, at $5,450 on 180-inch wheel base, weight 9,650 lbs., and also as Model RD3, at $5,500 on 198-inch wheel base, weight 9,750 lbs.

*Model RF1 is also available as Model RF2, at $5,650 on 204-inch wheel base, weight 10,500 lbs.

†Seven-speed transmission also available.

REPUBLIC LINE

*Model 75-4 also available as Model 75-6, priced $1,495, on 128-inch wheel base, with Lycoming 4SL engine, 6-cyl. 3¼ by 4½ inches, rated 25.3 h.p., weight 3,150 lbs.

*Model 76-4, also available as Model 76-6, priced $1,675, on 150-inch wheel base, with Lycoming 4SL engine, as in Model 75-6, weight 3,500 lbs.

†Model 60-61, also available with four-wheel brakes, $3,155.

**Model 62, same as 60-61, on 171-inch wheel base, $3,040.

†Model 25W-25WRB available with four wheel brakes.

**Model 66, same as 65, on 200-inch wheel base, $3,750.

**Model 25W, 25WB and 25WBR also available in 3½-ton capacities as Models S25W, S25WB and S25WRB on wheel bases of 165, 156 and 124 inches, priced $3,695.

**Models 35 and 35B also available in 5-ton capacities on wheel bases of 170 and 157 inches, priced $5,145.

**Model 85 also available as Model 86 on 170-inch wheel base, price $2,150.

**Model 50-51 also available as Model 51 on 170-inch wheel base.

REO LINE

*Tonner in wheel base, 123, 138; 1½-ton in wheel base, 137, 156, 152; 2-ton in wheel base, 152, 168; 3-ton in wheel base, 168 179, 184.

RUGBY

F—Chassis weight includes body.

STEWART LINE

*Buddy ¾-ton can be equipped with four wheel brakes.

*Buddy 1-ton can be supplied in 138-inch wheel base.

*Models 16 and 16X can be supplied in 145-inch and 160-inch wheel base.

*Models 24 and 24X can be supplied in 132 and 160-inch wheel base.

*Models 25, 25W, 25X and 25XW can be supplied with dual 32x6 tires, also 160-inch wheel base.

*Model 26X and 26XW can be supplied in 148 and 190-inch wheel base.

*Model 18X can be supplied in 148 and 190-inch wheel base.

*Models 19X and 22X can be supplied in 148, 172, 190 and 220 and 235-inch wheel base.

WHITE LINE

*Bus Model 53 is equipped with Booster Brakes and 50B and 54 with air brakes. Model 58 with air brakes as optional equipment.

Model 60 gross weight capacity, with 32x6 tires, 8,000 lbs.; 24x7.50 balloon tires optional at extra cost.

†Supplied in optional wheel bases.

FORD LINE

*Rear axle ratios of 5.1 to 1 and 7.35 to 1 are also available.

MERCHANDISING
ACCESSORIES
EQUIPMENT

WHOLESALE

DISTRIBUTION
SHOP EQUIPMENT
REPLACEMENTS

OAKLAND ESTABLISHES MODEL SHOP TO SHOW DEALER RIGHT METHOD

PONTIAC, Mich., July 18.—Service, instead of a side issue of the dealer's business, has become a major factor in swaying the sale of a new car, according to R. A. Armstrong, service manager of the Oakland Motor Car Company. It is more important than color or quick pickup in the permanent satisfaction the car will bring the owner.

"Years ago owners cared little about service because they seldom ventured beyond the territory served by their home dealer, "Mr. Armstrong said. "But today the motorist wants to feel that should his car require attention, he is within easy calling distance of a service station where he may get genuine factory parts and factory trained men to work on his car. He wants to know that service facilities are uniform and good wherever he may be.

"In anticipation of this need the progressive manufacturer is aiding his dealers in many ways to place and maintain service facilities on the highest plane possible. Service supervisors stationed in all quarters of the country keep constant watch over the dealers' shops in the territory; service instructors drill the men in the proper repair methods, and schools maintained at the factory put the mechanics through intensive courses in car repair work.

"As a further step in this direction we maintain at the plant at Pontiac, Mich., what we call a 'model service station.' This is laid out to serve as a pattern for the dealer in planning his own shop and shop work and tools. We also use it to demonstrate correct repair methods to dealers' mechanics who visit the factory. By doing this work in a model shop the dealers' shop men get the 'feel' of the shop and go home with definite ideas of how to improve their own local service stations.

"The model service station serves a third purpose in that it provides a suitable place where student mechanics may perform their 'laboratory' work. Each week classes of dealers' mechanics are brought in from the field for instruction at the factory. By doing their work in the model shop they also get the 'feel' of it and return to their own home shops with constructive ideas.

"The model service station with 10,240 square feet of floor space, is designed in size and equipment to meet the needs of the average Oakland-Pontiac dealer, and has a capacity of from fifteen to twenty cars a day.

"Equipment is absolutely complete. We know of no essential tool or machine on the market which we did not include, yet we avoided putting in anything of an experimental nature.

"The result is a shop ideal from every viewpoint for the dealers' needs, and one which members of our dealer organization in many sections of the country are using as a model to put their service to their owners on a new high basis."

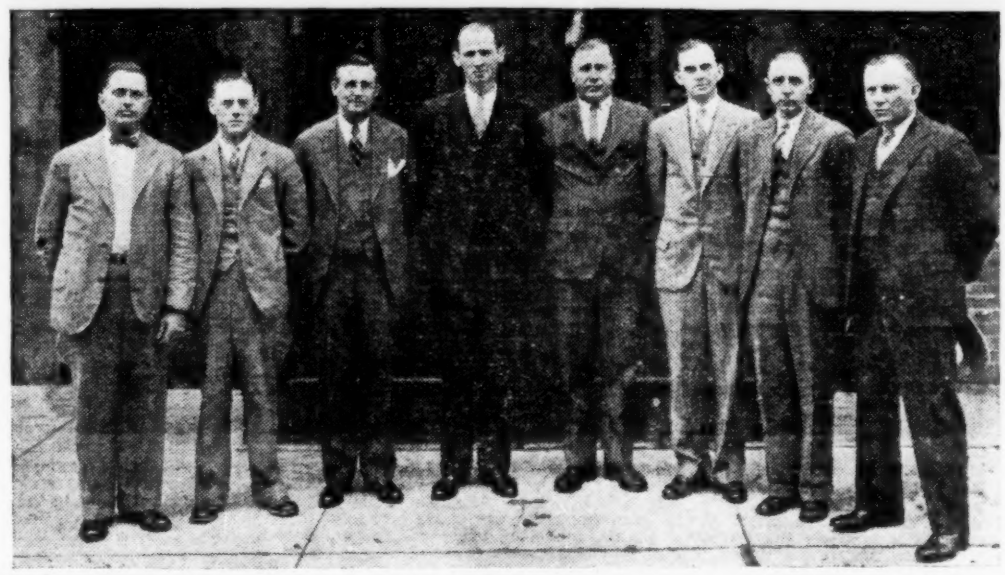
Wholesale Brevities

Harrisburg, Pa., July 18.—Charles Bennett, formerly in charge of stock for E. Mather Co., Harrisburg, is now on the road covering Lancaster and Lebanon counties.

Sunbury, Pa., July 18.—Sunbury Auto Parts Company has opened a branch at Shamokin, Pa. The new branch will be known as the Stephens Auto Parts Company and will be in charge of George Dagle. A complete mechanical department has been installed and will be operated under the direction of Frank Marx.

Wilkes-Barre, Pa., July 18.—K. & K. Auto Parts Company, Wilkes-Barre, now has a complete automotive machine shop. The new department is in charge of Carl Keisleing, who was formerly with the Scranton branch of K. & K. Auto Parts Company.

Jobber's Staff Visits AC Spark Plug Plant



W. B. TURNER, vice-president of Central Auto Equipment Company of Springfield, Ill., and four members of his sales staff visited the plant of the AC Spark Plug Company the other day. Left to right: W. A. Martin, F. E. Wilson, salesmen; W. S. Isherwood, AC general sales manager; Mr. Turner, J. M. Brash, salesman; A. S. Holmes, AC district sales manager; R. L. Buchanan, salesman, and W. F. Parker, AC territory representative.

Editor's Column

H. W. Sanders of the Citizens' National Bank, Los Angeles, says that "the greatest dangers are not those from outside, but those from inside the business. Lack of adequate accounting control is the most usual trouble, especially in the smaller business. Attempting to cover too much territory, or too many lines, is another. Personal causes, speculation, lack of intelligence in planning, too rapid development, too heavy buying, and, above all, a too liberal allowance of credit to customers—such are some of the causes from within the business."

One of the best informed men in the United States, a man who is thoroughly familiar with the wholesalers' problems, recently made these statements:—

"First—**The present day jobber does not sufficiently stress salesmanship.** The rank and file figure that smart buying is their salvation, instead of smart selling. It was so in the old days, perhaps, when markets and weather had to be watched closely, but not now.

"Nearly every manufacturer has a scheduled set of prices to jobbers varying with the size of purchases, and resale schedules are set. These are fairly well cut and dried, yet some hire buyers to try to break these schedules, where the time and energy should be concentrated on sales. Buying today is a job of auditing, checking prices, discounts, etc.

"Second—Sales managers are detail men. The average sales manager of the jobber today is a glorified correspondent. His time is so consumed with messy details that rarely has he time to devote to the extension of sales, the making of quotas, analyzing accounts, or trying to figure out how new customers can be obtained and the volume of sales increased with the same sales force. He rarely makes calls with salesmen, and, in nine cases out of ten, he isn't sufficient salesman himself to inspire men to greater sales efforts.

"He has little idea of co-ordination of his sales effort with that of manufacturers whose lines he is reselling. He has little idea of what's going on in the trade save by contact with men. He has little idea of what are volume lines, which pay the best gross profits, and on which he should concenerate. In other words, as said before, he ordinarily is no more or less than a glorified correspondent.

"Third—Choice of lines. The jobber essentially is not a pioneer of sales. In other words, he can take hold of an unknown product and put it over, but he rarely does. But he often thinks he can, and buys on special discount many lines that haven't a Chinaman's chance to survive. He should tie with established lines, work hard with them, and let the others follow.

"Fourth—Concentration on lines. Too much competition in his own house. Concentrate on one or two leading lines and sell them. Nine times out of ten, over 80 per cent. of his volume on that item is done with not more than two of the items made by different manufacturers.

"Fifth—Credits. If they don't pay they aren't good customers. Let the other fellow have 'em. To keep up volume sales figures, many jobbers are ultra lenient with credits, to their sorrow. It's the good-pay customers that make any business a success. Then why bother with the others?

"Sixth—Advertising to trade. Very few jobbers have any set plan of sales promotion work, direct, mail, or otherwise. Many haven't even a good mailing list of customers. A well conceived and properly executed sales campaign by mail will often keep a jobber's business out of the doldrums.

"Seventh—Lack of intelligent sales contact with store customers. The automotive replacement parts business is intricate; demands a lot of quick knowledge. A jobber may have one good salesman and a lot of others, but no effort is made to bring all the force up to par of the good man. A study or schooling system should be made attractive by some inducement for increased sales."

NEW CHICAGO BRANCH FOR TRANSITONE OPENED

Chicago, July 18.—The Automobile Radio Corporation, with headquarters in Long Island City, N. Y., announces the opening of a branch office and installation department at 3913 South Michigan Ave., Chicago. The Transitone, a radio receiver designed to be installed in an automobile, which is manufactured at the Long Island plant, is on display at the new office.

PAGLIERO SALES MANAGER FOR K. & K. AUTO PARTS CO.

Trenton, July 18.—James Pagliero, who for eight years was with the United Tire Stores of Trenton, and who for the past ten months has been sales manager for the Myers Accessory House of Harrisburg, Pa., has accepted a new position as general sales manager for the K. & K. Auto Parts Company of Scranton, Pa.

G. E. SEAWELL RETIRES

Sanford, N. C., July 18.—The Anderson-Seawell Tire Company has been succeeded by the Anderson Auto Service Company. G. E. Seawell has retired and sold his interest to J. W. Duke of Marion, O. The latter has come to Sanford to make his home.

NUDELMAN BROTHERS FORM NEW COMPANY

Seattle, Wash., July 18.—Charles Nudelman has joined forces with Harry Nudelman, a brother, who has been operating the Motor Car Supply Company of Bellingham, in formation of a new company to engage in distributing automotive parts and accessories in Seattle. The new firm expects to open for business at 1528 12th Ave., about August 1.

Standard equipment and accessory lines will be handled. Stockholders of the new company are said to include prominent automotive men.

Mr. Nudelman was formerly a stockholder of P. J. Cronin Company, having sold his interests on May 15.

Waco, Tex., July 18.—Joe Freeman, salesman for Ward-Dossett-Floyd Company, Waco, is now a benedict. The young lady was Mr. Floyd's secretary.

Lexington, Ky., July 18.—O. W. Murphy Company, Lexington, has installed a Van Norman grinder to better handle piston business.

CLARK

CLARK AXLES *and* METAL WHEELS

fulfill the rigid requirements of the larger truck and passenger car manufacturers. Built in a plant with large production capacity.

CLARK EQUIPMENT COMPANY
Buchanan Michigan

AXLES
Front & Rear
WHEELS
Single or Dual Tire
CAST STEEL HOUSINGS
TRANSMISSIONS

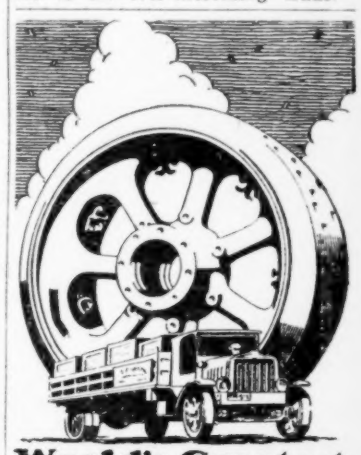
500 at Opening of Motive Parts Store

Milwaukee, July 18.—What was termed a real "knockout" meeting of the general automotive trades, and attended by an overflowing crowd of about 500 persons, was held in Milwaukee recently. The party was held in the South Side Armory and was for the purpose of celebrating the opening of the second Motive Parts Company of America, Inc., store in that city.

Ray Kiken, vice-president, and Pete Pettigrew, manager of the Milwaukee branch, as well as the entire staff of the two stores, worked with a vim to put the meeting over, according to Tom Duggan, and it was this willing spirit of co-operation that was largely responsible for the big success it turned out to be.

Ray Kiken made a splendid address of welcome, expressing the thought that the meeting was held entirely for the guests, not only for their entertainment but to try to pass on some ideas that would help increase their profits. Tom Duggan was there, of course, and he gave them plenty of ideas in his "Shop Profits" talk to keep them busy improving their methods. Tom was also master of ceremonies for the occasion and superintended the distribution of several hundred dollars' worth of valuable prizes. A twenty-two-piece band from the K. of P.'s, directed by Louis Behrend, furnished the music, which was one of the features of a bang-up party in every particular.

Auburn, N. Y., July 18.—F. & M. Auto Parts Company, 50 State St., Auburn, has completely rearranged its counters and shelf display space. The new arrangement puts it in position to give better service to an ever-increasing trade.



World's Greatest Truck Makers
use
Dayton
STEEL WHEELS

The users of Dayton Steel Wheels make up a most distinguished company. Their trucks and trailers are forever busy carrying the burdens of commerce over the streets and highways of the world.

Almost all of the leading truck makers of the world use Dayton Steel Wheels as original equipment on all or part of their production.

Dayton Steel Wheels are known wherever truck wheels turn. Their consistent performance helps the truck do its best job at all times.

Specify Dayton Steel Wheels —the accepted wheel for the modern motor truck

THE DAYTON STEEL FOUNDRY CO.
Dayton, Ohio

Dayton
The Mark of a Good Wheel

Aviation Daily News

Pratt & Whitney Co. Breaks Ground for New Aircraft Plant

Hartford, Conn., July 18.—Ground has been broken and operations started in East Hartford on the new plant of the Pratt & Whitney Aircraft Company. The building is to be 400x1,500 feet and of the latest monitor type of construction such as is used in Detroit. The plant is to cost $2,000,000. It is expected to be ready for occupancy about the first of next year.

When completed the aircraft company now located in Hartford will remove to the new place and the space in Hartford will be taken over by the small tool department of the Pratt & Whitney Company. Land has been set aside so that future expansion will be cared for easily.

While the company will have its private flying field at the new location the old hangar at the municipal airport in this city, which it has occupied since it began business, will be retained, it is announced.

The company which recently received additional contracts from the government is working day and night.

Firestone Tire Co. Recognizes Devotion to Duty

WILLIAM M. McCONNELL, holder of the world's record for continuous night airmail flying on consecutive nights, has been appointed pilot of the new tri-motor ship of the Firestone Tire and Rubber Company, shown above. As pilot of the new Firestone ship, McConnell will take an important place in industrial aviation. McConnell, shown standing near the plane, will pilot the tri-motor for transportation by executives between the Firestone plants, including those at Akron, Boston, New Bedford, Mass., and Hamilton, Ont.

Consolidated Claims 62% of Total Airplane Instrument Output

New York, July 18.—A survey has just been made by the Statistical Department of the Consolidated Instrument Company of America, Inc., which shows that there are at the present time fifty-two aircraft manufacturers in the United States who are operating on an actual production basis, and that approximately 6,500 commercial planes will have been turned out by the end of 1929.

The survey indicates, according to company officials, that of the fifty-two aircraft manufacturers, 62 per cent. use Consolidated instruments exclusively—16 per cent. use them as partial equipment—and 22 per cent. use other makes.

Of the estimated total production of 6,500 commercial planes for this year, 65 per cent. will be exclusively Consolidated equipped—22 per cent. partial equipped—and 13 per cent. will have other makes of instruments, exclusive of Consolidated.

The above report is based on estimated production figures of the fifty-two companies included in the survey and commercial contracts already on the books of the Consolidated Instrument Company.

Chicago, July 18.—A fleet of twelve 18-passenger tri-motored planes will operate over a new 20-hour Boeing passenger route between Chicago and San Francisco, according to an announcement here. The route will be flown continuously night and day.

Financial News

HUPP EARNS $2,062,093 IN FIRST FOUR MONTHS

New York, July 18.—The report of Hupp Motor Car Corporation for four months ended April 30, 1929, shows net profit of $2,062,093 after depreciation and Federal taxes, equivalent to $1.51 a share (par $10) earned on 1,364,641 shares of stock.

Consolidated income account for four months ended April 30, 1929, follows: Net sales, $20,582,343; cost of sales, $18,499,486; operating income, $2,082,857; other income, $427,958; total income, $2,510,815; depreciation, $167,528; Federal taxes, $281,194; net income, $2,062,093.

AUTOMOBILE MERCHANTS TO HOLD GOLF TOURNEY

New York, July 18.—At the height of the golfing season, the Automobile Merchants Association of New York, Inc., will hold its fourth monthly tournament on Tuesday, July 23, at the Winged Foot Golf Club, Mamaroneck, N. Y.

Registrations for this tournament are very heavy, as the golf committee, with A. G. Southworth, chairman; Fred J. Ryan, vice chairman; C. H. Jennings and C. I. Barrows, is extending the privilege to invite friends, due to the adequate facilities at Winged Foot. Keen competition is expected, and the committee has selected special prizes.

The next tournament will be held at the Westchester Biltmore Country Club, Rye, N. Y., on August 20.

MOTOR PRODUCTS REPORTS EXPANSION IN EARNINGS

New York, July 18.—Net profit of Motor Products Corporation for six months ended June 30, 1929, was $1,729,431 after depreciation, interest and Federal taxes, against $1,168,020 in first six months of 1928.

For the June quarter, net profit was $796,957 after above charges, compared with $932,471 in preceding quarter. No comparison is available for the June quarter.

Road Builders Meet At Chicago Monday

(Continued from Page 1)

finance and administrative work; C. E. Burleson, Pinellas county, Florida, whose sub-committee studies road design and construction; Hal G. Sours, Akron, O., who directs research in county highway maintenance, and Stanley Abel, Taft, Kern county, Cal., in charge of regional surveys and plans.

Those at the meeting from American Road Builders' headquarters here will include Charles M. Upham, secretary-director; C. N. Conner, engineer-executive, and James S. Burch, assistant engineer.

EXPORTS OF CASINGS 123,001 DURING MAY

Special from A. D. N. Washington Bureau

Washington, July 18.—Exports of automobile casings from the United Kingdom during May amounted to 123,001, as compared to 80,663 in April, the rubber division of the Department of Commerce announced today.

The leading markets for British tires, in the order of their importance, were Sweden, Italy, Irish Free State, the Netherlands, Argentina, British South Africa, New Zealand, British India, British Malaya, Germany and Denmark.

DONNER STEEL DOUBLES PROFIT IN HALF YEAR

Buffalo, July 18.—Donner Steel Company, manufacturer of alloy steel for the automotive trade, shows a net profit of $644,320 for the second quarter of 1929. This compares with a net of $307,345 in the same period of 1928. The plant is operating practically at capacity and third quarter production will approach that of the second quarter, which is reported to have been the largest in the company's history.

BARLING NB-3 AWARDED APPROVED CERTIFICATE

Marshall, Mo., July 18.—Approved Type Certificate No. 174 for the Barling NB-3 Monoplane, manufactured by the Nicholas-Beazley Airplane Company, Inc., of this city, nas been issued by the Department of Commerce.

The plane, which is a three place ship powered with a sixty horse power engine, is one of the first to be licensed under the new Department of Commerce requirements, which went into effect July 1. With the completion shortly of a modern $40,000 covering and dope plant, production will be increased to one plane per day. A Western branch of the company will be established the latter part of this month at Los Angeles.

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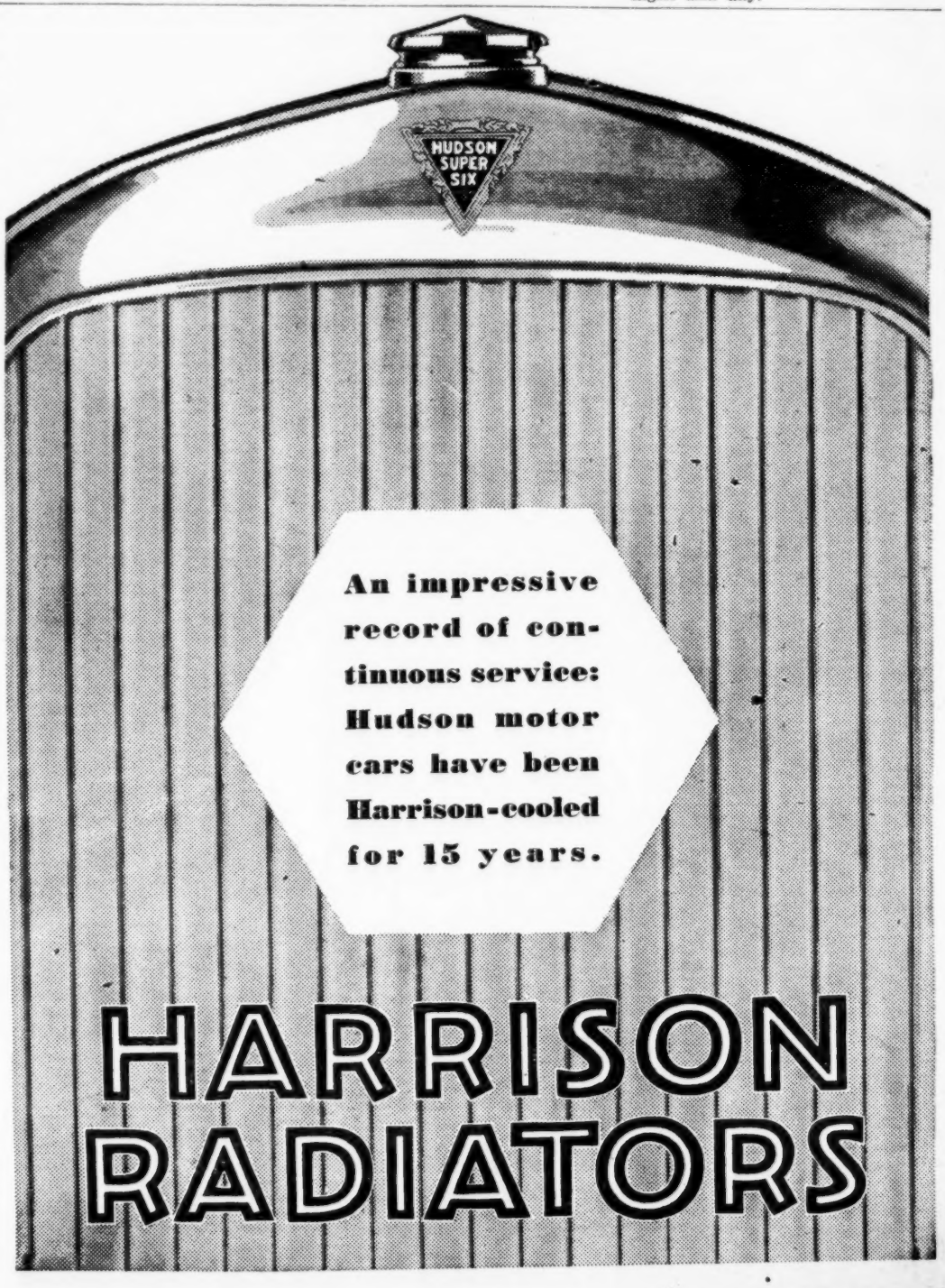
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